Health-Related Learning Needs and Interests of Selected Non-Institutionalized Elderly

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Abstract

The research question in this study was "How do the non-institutionalized elderly in the Hamilton-Wentworth Region perceive their learning needs and interests related to health?"

The theoretical foundations of instruction for adults were reviewed as well as learning needs and interests in adult education, the assessment of learning needs in general, and the assessment of the learning needs of the elderly.

The methodology used was a descriptive design. A research-based questionnaire-interview was developed, refined, and pilot tested. From a random sampling procedure, a participant group of 23 was secured. The questionnaire-interview was administered in a home visit situation. Data, which were collected, were coded, analyzed, processed, and printed.

The results indicated that each participant had many learning needs and interests of varying intensities. The participants had many preferences in the delivery of health promotion. The learning needs and interests had several significant correlations with other variables.

The implications of the results were discussed.

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CHAPTER I

INTRODUCTION

Problem Statement

The research question in this study was "How do the non-institutionalized elderly in the Hamilton-Wentworth Region perceive their learning needs and interests related to health?"

Rationale

There were many reasons for choosing this topic for inquiry. Palmer (1977) stated that the elderly are able to learn. Many people think that the elderly are unable to learn new things. This is a fallacy. Intelligence and ability to learn do not necessarily decline with age. Speed of response and manual dexterity may decline but learning itself does not. Palmer (1977) also stated that the elderly want to learn. Gilbert (1986) stated that the elderly want to learn about health. Gilbert continued by saying that the elderly not only want to learn about health, but that they are willing to make changes to their health behaviour.

Stewart (1985) stated that good health practices by the elderly improve their health and negatively correlate to mortality. Whitman (1986) also stated that education is a means of improving the health status of Americans.

This research, which has investigated the perceived learning needs and interests of the elderly, will help to assist the seniors' efforts to maintain, improve, or regain their health. It will also assist those planning and giving health promotion activities.

Canada is experiencing an age boom. The number of elderly in this country (Canada) will more than double within the next 35 years with the over 85 aged population increasing faster than the rest of the elderly (Health and Welfare Canada, 1986a). Eleven percent of the population in Ontario were 65 years or older in 1987 (Report of the Minister's Advisory Group on Health Promotion, 1987). The Hamilton-Wentworth regional percent was slightly higher at 12.1%. It was projected in this report that by the year 2000, 15.5% of the Hamilton-Wentworth regional population will be in this seniors' age group and that this percent will be 1.5% above the Ontario level.

With this trend the quality of life becomes a major issue (Stewart, 1985). The elderly will want and expect quality of life. This study will help all those concerned with the elderly, and the elderly themselves.

In the Courtenay, McConatha, Stevenson, and Suhart study (1982), the authors found that the learning needs and interests of the elderly were different from the ascribed needs and interests as assessed by professionals. This research will help to clarify this picture.

All too frequently, the learning needs and interests of the elderly have been assessed by health professionals with little or no input from the elderly themselves. This may have led to a limited response by the elderly to current health promotion programming. This research started with the elderly themselves and got their valuable input.

The elderly want to be involved with programming related to them. One example was the Elderly Residents in Ontario Document (Minister for Senior Citizens' Affairs, 1985). This research gave this segment of the population a chance to become involved with the educative process from the beginning. Hopefully those who are involved with health promotion are involving the elderly or will involve them in the process from the beginning.

Gray (1985) stated that elderly people are not a homogeneous group. Some are housebound, some very active, and some are institutionalized. Those involved with program planning should be prepared to develop different programs for different groups of the elderly. Differences and similarities will be seen in this research.

It is important to assess the perceived learning needs and interests of the entire elderly population. Jarvis (1983) stated that people have a basic need to learn, are life-long learners, and that self-education or self-directed learning is very common in the adult population. He also stated that adult learners can turn to many sources for information including radio, television, libraries, museums, and art galleries. It is possible that a large percent of the elderly have never been asked about their perceived learning needs and interests. If it is important that health promotion programs match learner needs and interests, it is also important to start with the elderly, all of them, not just the ones using professional services extensively.

Health promotion and prevention of illness have been current priorities for the government for a number of years at the provincial and federal levels. Evidence of this has been documented in reports and legislation (Stewart, 1985). The government has planned on increasing health promotion efforts which would enable people to increase control over and to improve their health (Health and Welfare Canada, 1986a). This discussion paper stated that health promotion efforts will slow down the rise of health care costs. This research will attempt to help link elderly consumers with appropriate community resources in order to promote informed self-care in the elderly. This linking will help empower this group and

provide a sense of autonomy for many elders.

In recent years a few studies have assessed seniors' health needs. An example of this kind of study is the "Services for Seniors Study" (Regional Municipality of Hamilton-Wentworth and Hamilton-Wentworth District Health Council, 1988). Few of these studies address the seniors' learning needs and interests, and when they do, it is in a very limited way. The specific area of inquiry of this study has been a neglected area. This study was designed to help fill this need for research. A research-based methodology has been designed which can be used again.

Definitions and Scope of the Study

In this study the term **the elderly** has meant those people who are 65 years old or older. In some studies the term was used differently. When this information was given in studies, it was included in this inquiry. The term **seniors** was used interchangeably with **the elderly** in this study.

There have been many different definitions of **health** over the years. Now the definition is generally given in positive terms, not merely indicating the absence of illness or infirmity. The World Health Organization defined health as "The state of complete physical, mental and social well being and not just the absence of disease and infirmity" (cited in

Kulys and Meyer, 1985, p. 65).

Health can change from day to day and hour to hour. Each person has his or her own potential and is located on a health continuum. High level wellness can be seen as a journey toward reaching his or her potential. Peggy Field (1989) stated that the humanist approach defines health as a positive goal to be achieved individually. She continued on to say that disease, illness, and problems can co-exist with health. The definition of health which was used in this study was an optimal level of functioning related to the aging process including physical, mental, and social well-being.

The Gage Canadian Dictionary (1983) defines **a need** as a want or lack of a useful or desired thing; a useful or desired thing that is lacking; a necessity, something that has to be or requirement. The word **learning** as an adjective is related to the gaining of knowledge or skill. It is stated later in this chapter that some learning needs and interests are more urgent than others. In some extreme cases they could mean life or death. **An interest** was defined in the same dictionary, Gage Canadian Dictionary (1983), as a feeling of wanting to know, see, do, own, share in, or take part in.

Knowles (1970) describes an educational need as the distance between an aspiration and a reality.

It was felt, for the purpose of this study, that perceived learning needs and interests exist when the learner

feels he or she lacks some information or skill that he or she wants.

Learning needs and interests used in this study appear to have the same meaning as needs for information reported in Cuthbertson (1988) and the term educational needs used by Knowles (1970).

The term **non-institutionalized elderly** stated in the problem statement at the beginning of the proposal was defined as the elderly residing in the community. All the elderly residing in nursing homes, homes for the aged, rest homes, retirement homes, and lodging homes have been excluded.

This research described the perceived learning needs and interests related to health of the non-institutionalized elderly in the Hamilton-Wentworth Region. No effort was made to ascertain why the elderly wanted to learn about health topics. In addition, there was no attempt to assess the seniors' present knowledge base related to health or the reliability of this knowledge.

Assumptions

There were some assumptions made before this research was done. Seniors have learning needs and interests expressed or unexpressed. Seniors are not a homogeneous group. They are different in many ways. Some seniors believe that health is

something that is done to them and that infirmity is an inevitable part of old age. The learning needs and interests of people are always changing. Some are more urgent than others. Most seniors want to maintain control of their life. Most seniors are taking personal responsibility for their health and the gaining of knowledge necessary to make health decisions. Seniors may not understand what health promotion is and how it could help them. Health can co-exist with illness. Few seniors in the Hamilton-Wentworth Region have been asked about their learning needs and interests related to health.

The chapters that follow are The Literature Review, The Methodology, The Results, and The Discussion.

The literature review was a systematic review of the literature pertaining to this study, moving from the theoretical foundations of instruction for adults to learning needs and interests in adult education to the assessment of learning needs to the assessment of the learning needs of the elderly.

The methodology included the methods used, as well as the related philosophy. The methodology included: a description of the methodological type used; a detailed description of the creation of a reliable, valid questionnaire-interview; the procedure for securing a random sample; the procedure for the data collection; data processing and analysis; and a detailed

participant group description.

The Results chapter included all the results from the data collected, summarizing them into tables.

The Discussion chapter included a summary of the first four chapters as well as a discussion of the results as they related to the study. Implications, conclusions, and recommendations related to the research followed.

CHAPTER II

REVIEW OF THE LITERATURE

The main area of inquiry in this research was related to the learning needs and interests of the elderly. The literature review covered the theoretical foundations of instruction for adults, learning needs and interests in adult education, the assessment of learning needs, and the assessment of learning needs of the elderly.

Theoretical Foundations of Instruction for Adults

John Dewey (1916, 1938) believed in progressive education, that education related to all of life, and so in its present state needed to be reconceived. He stated that education facilitated growth and development in all of us. Dewey stressed the problem-solving approach, starting with the problem of the learner within a social context and working this through in a scientific way. This meant that the process was regulated by the aims and rules of inquiry. From this position came the idea of a changed relationship between the teacher and the student, where the teacher facilitated and guided and was seen as a research advisor. The teacher did not interfere with or control the process. This facilitating

and guiding approach to inquiry was different from the traditional didactic approach. Dewey stated that the learner should control the learning process by defining the problem, developing hypotheses about it, and testing the hypotheses by examination of the empirical evidence. The teacher's role was to provide the right type of experience needed for learning, so that the learner's growth and development followed and the learners learned how to learn. Freedom, experience, and discipline were emphasized by Dewey. He felt that genuine education must come through experience. He believed that the teacher should be aware of the capacity, needs, and past experience of the students.

A different conceptualization is provided by the critical theorists. In Paulo Freire's (1972) theory of teaching, he emphasized the importance of going to those who have a learning need to listen to them so that the educator could learn from them and their reality. In this way a genuine dialogue was created. Within this dialogue the learner was encouraged to identify problems from his or her reality, and there was mutual planning of the teaching and learning, so making it relevant to the needs of the participant. The humanity of the learner was respected. He believed that education was an active process and that the teacher should not control the knowledge learned or the learning outcomes. The learner learned and then changed his or her environment.

Political implications were implicit and explicit in the theory. He advocated breaking down barriers between the teacher and learner, speaking in the learner's language, understanding what meaning the learner had of his or her world, finding out the needs of learners as they saw them, starting where the learners were and encouraging them to explore and learn from their experiences. Freire emphasized the working out of collective problems in groups.

Ivan Illich (1971), another critical theorist, presented an alternative approach to education. Illich stated that in Western society the professions dominated ordinary people, prescribed what people needed and institutionalized it within the profession's own territory. He suggested that it was necessary to deschool society. Illich proposed that learning networks be established where the student could gain access to educational resources to define and reach his or her own goals. Four things would help this: reference services to educational objects, skill exchanges, peer matching, and reference services to educators at large. Some adult educators have sought to respond to the learning needs of people and to create networks where teaching and learning could occur outside of the institutional framework.

In current adult education theory, the work of Malcolm Knowles is most commonly cited. He stated that there had been five decades of rapid change in adult education, but that

basic concepts had remained the same (Knowles, 1980). He described the purpose of education as producing an educated person by the transmission of content information. However, since the knowledge explosion, the technological revolution, and the adoption of a social policy of equality of educational opportunity, the purpose of education had changed to that of producing competent people who engaged in life-long self-directed learning. Adult education should provide resources and support for self-directed learning, thereby linking learners with resources. He also stated that adult educators originally emphasized the teaching process, but then the learning process began to receive much more attention. He described the andragogical model and distinguished it from the pedagogical model (Knowles, 1984b). The andragogical model was designed for use in helping adults learn (Knowles, 1984a). There are six basic assumptions to this model. Adults needed to know why they need to learn something before starting to learn it. The learner is self-directed. Adults come to the learning experience with more experience of varied kinds than children. Adults become ready to learn when they see a need to know things related to their real-life situations. Adults come to learning situations with a life-centred orientation. In adults, the strongest motives to learn are internal pressures (Knowles, 1984a).

Knowles (1980) listed 16 principles of teaching which are

presented in Table 1. Although the theoretical foundations of adult education are in their infancy, considerable work has been done. Some of these writings have been discussed.

Learning Needs and Interests in Adult Education

Most authors have agreed that it is important in adult education to assess the learner's needs and interests as he or she perceives them. Brundage and MacKerarcher (1980) stated that it was important to assess the needs and problems of the adult learner and that all educational planning should begin with the learner. Kidd (1973) stated that learning was essentially an attempt by the person to satisfy his or her needs as he or she perceived them. Knowles (1980) stated that it was important to assess the learner's needs as perceived by him or her and that self-diagnosis of learning needs produced higher motivation to learn. The concept of assessing learner needs has been well embedded in adult education theory.

Other adult educators working with the elderly have agreed that the elderly should be consulted about their perceived learning needs and interests. Picariello (1986) stated that it was important to assess the perceived learning needs of the elderly. She did not say how this was to be done, except to say that the elderly should be involved in the

Table 1

Knowles' Principles of Teaching Adults

The teacher:

- exposes learners to new possibilities for self-fulfillment
- helps learners clarify their own aspirations
- helps learners diagnose
- helps learners identify life-problems resulting from their learning needs
- provides physical conditions conducive to adult learning
- accepts and treats learners as persons
- seeks to build relationships of trust and cooperation between learners
- becomes a co-learner in the spirit of mutual enquiry
- involves learners in a mutual process of formulating learning objectives
- shares with learners potential methods to achieve these objectives
- helps learners to organize themselves to undertake their tasks
- helps learners exploit their own experiences on learning resources
- gears presentation of his own resources to the levels of learner's experience
- helps learners integrate new learning to their own experience
- involves learners in devising criteria and methods to measure progress
- helps learners develop and apply self-evaluation procedures

(Knowles, 1980, pp. 57, 58)

planning and decision-making related to their education. In the Courtenay publication (1982), assessment of the target group's needs in adult education was emphasized, especially when working with the elderly. Some educators who planned educational programs for the elderly in Iowa felt that it was important to send out a letter to assess the learning needs of the elderly (Continued Development and Dissemination of Materials for Serving Senior Adults, 1983). Lomen (1974) used an interest survey before planning a health program for the elderly.

Biette, Matthews and Schwenger (1983) described a health promotion program. The Department of Public Health in Toronto and students from the Faculty of Nursing, University of Toronto, developed 12 Older Lifestyle Kits which were used by public health nurses in health education programs with groups of older adults. The topics chosen for the kits were based on those frequently requested by older people themselves. This example clearly indicated that the senior population was expressing its learning needs and interests and that materials and programs were planned accordingly.

Clement (1989) outlined a health promotion and information program that was set up at the Ottawa-Carlton Regional Health Department. The needs of the seniors were identified. This author stressed the point that health promotion has aimed to increase the individual's decision-

making toward his or her own health and to help him or her control his or her quality of life through personal strategies. In Stephanie Fallcreek and Molly Mettler's (1984) book, the authors have described how to set up health promotion programs for the elderly. They stated that the older population's interests and preferences should guide the planning process.

Hahn and Riddell (1980?)[1] stated that program planning for teaching older adults should include determining their needs and interests. The most successful programs began at the participant's point of orientation. They listed ways in which needs and interests could be determined. These were using questionnaires and checklists with existing groups of retired people, conducting a community survey, consulting with existing agencies offering educational programs, reviewing professional literature, and utilizing local resource persons. They emphasized using as many different methods as possible to search out community opinion.

Considering the articles and books reviewed, there seemed to be agreement among adult educators specializing in the elderly that assessing the perceived learning needs and interests of the elderly was an important step in the educative process.

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[1] ? As cited in References.

Assessment of Learning Needs

At this point, consideration was given to how these learning needs have been assessed. The review revealed a reference to questionnaires designed to assess the needs and interests of adults themselves (Knowles, 1980). Few specific details about these were given, except to say that projective questionnaires and sentence completion questionnaires gave deeper and more reliable answers. Another survey, called Canada's Health Promotion Survey, was conducted using 11,000 telephone interviews across Canada (Health and Welfare Canada, 1985). The Active Health Report was a summary of the survey results. All those contacted were 16 years and over. Random digit dialling was used to select the people for the telephone interviews. All of the questions were of the self-reporting type. There were 109 questions used that asked for the opinions of the respondents on health issues. One of the eight parts was on learning needs related to health. Twenty-one percent of those interviewed reported that they wanted more information on various health topics. This survey report stated that the survey had some limitations, such as all those included were adults, owned telephones, were non-institutionalized, plus the fact that some topics were left out. These two examples of assessing the learning needs of adults as they perceive them indicated that a few attempts

have been made to use instruments such as questionnaires and telephone interviews for this purpose. It is also evident that the government was showing interest in the area. In this general area, only two studies were found.

Assessment of the Learning Needs of the Elderly

Specific attention was next directed to examples of studies related to the area of inquiry addressed in this study. Two simple check list interest surveys and two studies were found. The first interest survey was made before planning a program related to health for the elderly (Lomen, 1974). The check list included 22 topics. The elders were asked to check five topics that would be of interest to them. The checks were added up, and a program topic was chosen from the results.

The second interest survey was sent out to elderly people who attended meal centres. This was done before various programs were planned. Fifty-six topics were listed, with 38 related to health (Iowa State Department of Public Instruction, 1983). The elderly were asked to check off all of the areas they were interested in and to underline one or two of most interest to them. They were also asked to choose which form they wanted the educational programs given in: newsletter, newspaper, club meetings, television, or radio.

From the information gathered, eight programs were designed and given.

The Seniors' Health Information Needs Study (University of Moncton, 1989) was undertaken by researchers at the University of Moncton, Moncton, New Brunswick. Its objective was to identify the needs of the francophone senior citizens of south-east New Brunswick in relation to health. A questionnaire was used including the following topics: the information needs of seniors, their physical health and psychological well-being, and their consumption of alcohol, tobacco, and medication. Over 650 people aged 60 and over responded to the questionnaire. The source reviewed did not elaborate on how the names were selected or how the questionnaires were distributed. The respondents reported a high level of need for information on the following topics: aging, prevention of illness, relaxation, mourning, and the effects of medication. The respondents preferred to receive health information by television or publicity. The least favoured method was through house calls by nurses. It was difficult to evaluate this research because few details were given related to the methodology.

The Courtenay et al. (1982) study was reviewed. The authors wanted to ascertain if elders' and professionals' assessment of learning needs were similar or different. The group of elders questioned numbered 505. They were 60 years

of age and older. The group of professionals used in the study included professional nutritionists and adult educators and numbered 627. A check list questionnaire was used. It was divided into six subject sections. Health interests was one subject section. The questionnaire also measured the intensity of the interests on a four-point scale. The study found that there were marked differences between the elders' and the professionals' assessment of learning needs. It was difficult to evaluate this study because of the limited information given. Generalizability of the study would be limited because no random sampling was used in the methodology.

The two studies which were found relating to the specific area of inquiry with the elderly were limited in scope and difficult to evaluate. The first two simple check lists could not be considered research.

A major study, Services for Seniors' Study, Mapping the Way to the Future for the Elderly, (Regional Municipality of Hamilton-Wentworth and Hamilton-Wentworth District Health Council, 1988) was carried out in the Hamilton-Wentworth Region. It was published in October, 1988. It was a study of the health care and social service needs of the elderly in the Hamilton-Wentworth Region until the year 2000. The emphasis was put on the present and future services to seniors. Seniors were asked to state their service needs in workshops

and a telephone survey. The area of the senior's learning needs and interests was not addressed directly.

The literature review substantiated the importance of assessing the perceived learning needs and interests related to health of adults generally and of the elderly particularly. The lack of relevant research in this area emphasized the importance of addressing the learning needs of the elderly in a systematic manner. The present study made a step in this direction by providing an assessment methodology and describing one group of participants from the population.

Footnotes - Chapter I

1. Hahn, M., and Riddell, G. (1980?). Effective teaching and programming for older adults. Victoria, BC: University of British Columbia, Centre for Continuing Education.

CHAPTER III

METHODOLOGY

A descriptive research design was used in this study. The purpose of the research was to describe how the non-institutionalized elderly in the Hamilton-Wentworth Region perceive their learning needs and interests related to health.

Instrumentation

Many attempts were made to find a reliable, valid instrument to use in order to gather data appropriate to the problem question of this study. An extensive literature review was conducted. Three government departments were questioned. These were Canada Health and Welfare, Ottawa; the Ministry of Education, Toronto; and the Ministry of Health, Toronto. No appropriate instrument was found.

At this point, an instrument was developed to describe the health-related learning needs of the non-institutionalized elderly in the Hamilton-Wentworth Region. A questionnaire-interview was chosen for two reasons. The literature indicated that the most commonly used data collection techniques are survey questionnaires and interview guides (Moore, 1980, cited in Cuthbertson, 1988). It was felt that

a questionnaire-interview would give the most reliable data when collecting information from the elderly. They respond to face-to-face contact better and they like to answer questions at their own pace.

It was felt that certain information was needed for this study. The list of topics needed is in Table 2. The topics in Table 2 were chosen because the main focus of the research was the learning needs of seniors and how they related to other participant characteristics, preferences, behaviour, and health.

Two guides were consulted and used in the development of the questionnaire-interview in order to produce reliable, accurate responses from the seniors interviewed (Dillman, 1978 and Woodward and Chambers, 1983). The questionnaire-interview was designed to collect both qualitative and quantitative non-parametric data. No deliberate effort was made in developing this questionnaire-interview to develop an instrument whereby the data could be directly compared with other measurements or instruments, although many areas may be similar or identical. The rationale for this was that it was the participants' perceptions that were of primary importance in this study. An expert on instrument construction gave assistance throughout the questionnaire-interview development.

The final questionnaire-interview is in Appendix A. There were different types of questions included in this

Table 2

Topics Included in the Questionnaire-Interview

1. Participants' learning needs related to both lifestyle (prevention) topics and illness and health problem topics, including the intensity of the learning needs.

2. Participants' preferences of sources of health information.

3. Participants' learning behaviour related to health topics and sources in the last 12 months.

4. Participants' perception of their health status.

5. Participants' perception of their illnesses and health problems.

6. Do illnesses and health problems in 5 above present any difficulty in carrying out their daily activities and the level of difficulty, if any?

7. Participants' perception of their chronic illnesses and health problems.

8. Participants' wearing of glasses or contact lens.

9. Participants' perception of their eyesight (with glasses if necessary).

10. Participants' ability to read newsprint and magazine print.

11. Participants' ability to hear normal talking tones.

12. Participants' wearing of (a) hearing aid(s).

13. Participants' mobility.

14. Participants' means of transportation.

15. Participants' alcohol consumption.

16. Participants' smoking behaviour.

17. Participants' weight problems.

18. Participants' use of non-prescription drugs.

Table 2 (continued)

19. Participants' use of community agencies.

20. Participants' sex.

21. Participants' marital status.

22. Participants' housing arrangements.

23. Participants' living arrangements.

24. Participants' age.

25. Participants' country of birth.

26. Participants' first language.

27. Participants' ability to speak English well.

28. Participants' ability to read English well (perception of participant).

29. Participants' education.

30. Are the participants working at a paid job?

31. Are the participants doing volunteer work, and, if they are, what kind?

32. Participants' main life work.

33. Participants' income.

34. Participants' additions.

35. Participants' comments related to the questionnaire-interview.

36. Anecdotal notes of the interviewer.

study. No answer choices were given in open-ended questions. The following questions were of the open-ended type: 3, 4, 11, 31, 37, 39, 40, and 41. There are two kinds of closed-ended questions. Closed-ended questions with ordered choices are gradations of a single dimension of thought or behaviour. The following questions were of this type: 9, 13, 20, 25, 29, and 38. Closed-ended with unordered choices was the second kind of closed-ended question used. Question 26 was this kind. In partially closed-ended questions, choices were provided, usually unordered, and there was also an opportunity to give one's own response(s). This opportunity was often given by the use of the category labelled **other - please specify**. Questions 1, 2, 7, 10, 19, 27, 28, and 34 were of this type. Questions 5, 6, 8 (a), 8 (b), 12, 14 (a), 14 (b), 15, 16, 17, 18, 21, 22, 23, 24, 30, 32, 33, 35, and 36 were Yes-No type questions.

The learning needs were assessed first in Questions 1 and 2 because of their primary importance. Question 1 included life style topics and Question 2 included illness and health problem topics. The list of topics was felt to be a comprehensive list but not exhaustive. This was not seen as a problem because the senior had an opportunity to add to each question in the **Other** section.

Question 10 was placed after Questions 1 and 2 because it was felt that the seniors might feel they should be interested

in topics if they identified them as one of their current illnesses or health problems.

The questions related to the topics in Table 2 followed Questions 1 and 2. Some sensitive questions such as income were placed near the end of the questionnaire-interview. A good rapport between the senior and interviewer would have been established by then.

At this point in the development of the questionnaire-interview, it was administered to a 66-year-old female. The questionnaire was given before feedback was requested. It took approximately an hour. After it was given, the senior was asked if it was clear, comprehensive, well-worded, and an appropriate length. The general response was that it was not too long or boring, but that there was no differentiation between a strong, personal need and a general interest. It was decided to add **interests** to the term **learning needs** in the entire study to facilitate understanding. There was no attempt in this study to assess the reason the seniors wanted to learn health topics.

Other suggestions were given after the questionnaire-interview. All discussion concerning corrections will use the numbering of the final questionnaire-interview in Appendix A. In the introduction it was suggested that the words **in relation to health** be added after **learning needs.** The words **related to health** were added. In Question 1, two additional

topics were suggested: maintaining control and adapting to change, both physical and environmental. The topics **maintaining control** and **adapting to change** were added. The suggestion was given to change the wording of Question 2 (pp) which was heat, cold, and being elderly. It was reworded to read **body temperature problems - too cold or too hot.** This change made it clearer.

It was questioned if the word **authoritative** should accompany the sources of information in Questions 5, 6, and 7. Since this was not an issue in this study, it was not added. A question asking if there were unmet learning needs was dropped after the suggestion was given. Seniors would probably not understand this question.

Question 8 was reworded after a suggestion to include both **in the evening** and **given during the day** with separate **Yes-No** answers. This was important information for community programming.

The topic **speech impediment or impairment** was removed from Question 10 after the suggestion was made that this would be evident to the interviewer. Question 11 was reworded to say **which health problems or illnesses you have would you say are chronic (You have been under the care of your doctor for the condition for a minimum of three years).** After the suggestion was made, Question 13 was reworded to read **How about your eyesight? Is it excellent, good, fair or poor?**

This was clearer language. After the suggestion was made, Question 15 was changed to interviewer observation only. This seemed to be appropriate.

In response to a suggestion to reword Question 16, it was changed to **Do you wear (a) hearing aid(s)? Yes __ No __.** The meaning was clearer. After the suggestion was made, Question 31 was changed to read **What is your first language?** from **What is your mother tongue?** It was clearer. It was decided to change Question 32 to interviewer observation only. By this time in the interview, the level of spoken English would be evident. In response to the suggestion made, Question 33 was reworded from **Do you read?** with Yes __ No __ responses with space for elaboration to the final form in Appendix A.

It was decided that Question 1 (l) should be reworded to **Exercise for seniors** from **Fitness and Exercise for seniors.** It was simpler and retained the same basic meaning. Questions 5 and 6 were simplified and shortened to the form in Appendix A. It was felt they would be too confusing for the seniors.

The next step in the development of the questionnaire-interview was to establish face and content validity. This was done by having experts and specialists examine each item on the questionnaire-interview to see if it met a pre-determined set of criteria or objectives (Sax, 1968). Seven experts and specialists were contacted and asked if they would critique the questionnaire-interview. All seven agreed to

assist with the study in this way. The seven experts included two researchers from the health care system, one epidemiologist and questionnaire expert who specialized in the area of health care for the elderly in the Hamilton-Wentworth Region, two public health staff nurses with over 11 years of experience each in the Hamilton-Wentworth Regional Health Unit, one nurse specialist in gerontological nursing from McMaster University School of Nursing and the Hamilton-Wentworth Regional Health Unit, and the public health nursing supervisor of the seniors' program at the Hamilton-Wentworth Regional Health Unit. The letter of instructions which was sent to them is included in Appendix B.

Many suggestions were received and used to refine the questionnaire-interview. Some suggestions were not used. The list of suggestions and rationale for their use or non-use follows. The questionnaire-interview was too long and needed more focus. Many words were too sophisticated. The length and basic structure were not changed at that time. It was felt that the pilot testing would give valuable input about the length and language comprehension. A list of words which could cause misunderstanding was kept and definitions were added to the questionnaire-interview using the Encyclopedia and Dictionary of Medicine and Nursing (1972). These definitions were put in brackets and given only if the participant did not understand the terms used. It was felt

that the wide focus was appropriate because an overview of the area was sought and few studies of this nature had been done. One expert suggested fitting functional status into categories. This was not done because it was not needed, given the objectives of this study.

The following section discusses the introduction. The introduction could be put in a paragraph. This was not done because the questionnaire-interview would be read and point form was considered better. The preposition **on** before senior citizens should be **from**. The change was made. It was suggested that the section after Hamilton-Wentworth Region be expanded. This was done. (See the final form in Appendix A.) The use of the word **government** was misleading. The word was left. The meaning appeared clear. It would be good to add a line after the word **confidential**. This was done. (See Appendix A.) The **let me read** line was not necessary. This was left because it was felt it was a good transition sentence. The suggestion was made to add a line after the word **question**. This was done. (See Appendix A.)

In Question 1 (c), environmental health issues may not be understood. This was another suggestion. It was changed to the final form. (See Appendix A.) After the suggestion was given to add vision, hearing and dental topics, **dental care** and **care of the eyes** were added to Question 1, and **coping with poor hearing** and **coping with poor vision** were added to

Question 2. A spelling mistake in Question 1 (a) was corrected.

One expert suggested that 1 (h) and 1 (j) are part of 1 (g). Although this was true, the topics were left because it was felt that seniors would not be aware of this fact. Another expert suggested that Questions 1 (p) and 1 (q) should be combined. They were left because it was felt that the seniors would respond differently to each of these topics. The meaning of Question 1 (s) was questioned. The wording was changed to the final form in Appendix A. Question 1 (cc) should be clarified was another suggestion. It was changed to **understanding medications and their proper use.** Question 1 (m) should be changed to **foot care.** The change was made. Question 2 (ff) should be placed after 2 (j), one expert stated. This was done.

A reviewer asked "How do you distinguish between Questions 2 (bb) and 2 (cc)?" The topics were restated as found in the final form in Appendix A. In Question 2 (qq), it would be good to add the word **financial.** This was done in response to the suggestion. Questions 2 (aa), 2 (dd), and 2 (ee) are closely related topics, one reviewer stated. It was decided to leave them as they are because seniors need more elaboration than professionals need. Another suggestion recommended that 2 (l) should be changed to include **brittle bones.** It should also be located next to **back problems,**

arthritis, and **rheumatism**. These changes were made. Question 2 (11) should have **handicap** added. This was done.

It would be helpful if Question 10 had identical topics to Question 2 and the part of Question 1 used. This was done. The levels of interest in Questions 1 and 2 were changed to the final form in Appendix A.

Question 4 could have categories to choose from, and it may be difficult to answer. It was left because it was felt important to let the seniors answer as they wanted to and that the answer would give valuable information, which it did. It also emphasized the learners' responsibility for his or her learning.

In Question 6, change the words **come across**. This wording was left because no other words seemed to convey the meaning better. A reviewer asked "Is a 12-month recall too long a period in Questions 5 and 6?" It was felt that this was an appropriate time limit.

It was suggested that Question 7 be reworded. The assumption may be that they want to learn. The question was reworded to include the words **if any**. Suggestions were given to add these topics to Question 7: information from newspapers, magazines, pamphlets in the doctor's office, mailings, health fairs, and seniors' centres. The topics that were added were: information from newspapers, magazines, pamphlets in the doctor's office, and senior citizens'

centres. Another suggestion was that you could prioritize the list in Question 7. This was not done because it was considered too complicated for the seniors. It was suggested to reorder Question 7. This was done.

Question 10 was set up differently. The participants were asked if they had these illnesses and health problems now and if they presented any difficulty in carrying out their daily activities and the level of difficulty presented. (See the final form in Appendix A.) Two heart problem topics were merged in Question 10, and the word **serious** was dropped. The topic **stroke** was kept separate from the **heart problem** topic. Seniors would probably see these as different topics. As mentioned previously in this study, no attempt was made to set up questions to match other formats, although it was suggested. There was no listing of the activities of daily living. It was felt that the seniors would understand what was meant.

Question 11 was changed to the final form in Appendix A, to include the participant's assessment of his or her chronic illnesses and health problems as well as the doctor's. Question 24 was reworded from **involved with** to **receiving services** and placed later in the questionnaire-interview to achieve a better flow. Question 14 was divided into section 14 (a) and 14 (b). (See Appendix A.) The hearing Questions, 15 and 16, were adjusted for clarity. (See the final form in

Appendix A.)

In Question 17 the word **able** was left instead of substituting the word **do**. It was felt the meaning was clear. It was also felt that seniors would know the size of an average block rather than another measurement. Question 18 was changed to state **ten stairs**. The meaning would be clearer. Question 20 was changed to the final form in Appendix A. A clearer picture would be obtained from this form. The wording in Question 22 was changed from **ideal weight** to **what you would like it to be**. In the latter form there would be no unnecessary discussion of ideal weight and it would give the information sought.

There was no need to ask the seniors about the prescription drugs they took. The information was not needed in this study. In Question 23 the words **non-prescription drugs** were left. They would be changed later if there was any confusion in the pilot testing. It was felt that the transition sentence after Question 23 was not needed and it was removed. The flow of the questionnaire-interview already seemed satisfactory.

A question was added to ask the marital status of the seniors (Question 26). It was felt that this might have a relationship to their learning needs and interests. It was felt that educational levels needed to be listed in order to compare the answers to the learning needs and interests.

The groups in Question 38 were reduced without losing the meaning in doing so. It was decided to ask for monthly income because most regular income of seniors comes in monthly. A paper was used to give to the senior with Question 38 so that they could indicate the appropriate letter. It was felt that having the figures in front of the senior would make selection easier.

Questions 27 and 28 were placed earlier in the final questionnaire-interview. It was felt that the housing information in Question 27 would give valuable information.

The next step in developing the instrument was the establishing of reliability by pilot testing. Five seniors were given the questionnaire-interview in the pilot testing. One name was secured in response to a notice placed in the Seniors' Centre in the Hamilton Y.W.C.A. The other four were contacted and asked to participate. They had recently applied for an insurance policy and had received a parametric assessment from a Hooper-Holmes nurse. Permission was given by the directors of both these organizations.

Three of the five seniors in the pilot testing were men and two were women. Their ages ranged from 65 to 75 years old. Three were from the Municipality of Hamilton, one from Stoney Creek, and one from Dundas. The five participants were asked if the questionnaire-interview was clear, used understandable words, and was an appropriate length. They

were also asked if the questions were related to the topic and to give their general response.

The questionnaire-interview took from 32 minutes to an hour to administer. Each participant gave a good general response. Each stated that it was an appropriate length, clear, and understandable, and each question was related to the topic. The questionnaire-interviews ran smoothly and the participants were friendly. Some seniors wanted to know where to get health information. The Hamilton-Wentworth Regional Health Unit was suggested.

Some suggestions were given and adjustments made from these suggestions. The definition of health, which has been used in this study was added to the introduction because one senior was slightly confused about the topics which would be considered related to health. Clarification was asked for in Questions 1 (b), 1 (s), 1 (v), 2 (m) and 2 (n). These questions were reworded and definitions and examples were added. It was suggested to add a **friends and relatives** category to Question 7. This was done. After a suggestion was given, the word **now** was added to Question 24 and examples were given.

During the pilot testing it became evident that a few more corrections would improve the instrument. It was felt that problems with weight control and problems quitting smoking belonged in Question 2. It was decided to add another

section to Question 7 (t): Are you aware of this service? Question 16 was shortened to the form in Appendix A. The extra information was not needed. It was felt that Question 29 should be changed to ask for the participant's birth date. Their exact age would then be known, not just the year of birth. It was felt that the word **well** should be added to Question 32. This was done. A question was dropped asking if the participants wished to read more. It was not needed and considered too sensitive.

After the pilot testing was completed, it was decided that the questionnaire-interview was not too long and all the words were understood. Many definitions were added using the Encyclopedia and Dictionary of Medicine and Nursing (1972). Some were questioned by the expert reviewers, a few by those participants used in the pilot testing and any word which might need a definition was given one. The words in the questionnaire-interview which have brackets around them were not given unless the first part of the question was not understood. During the pilot testing the comment was made that seniors do not want to be treated as if they do not understand commonly used health and illness terms.

In order to help the seniors remember the categories in Questions 1 and 2 while the topics were being read, it was decided that a paper would be given to them to hold until the end of Question 2 (Appendix C). Another paper would be given

to hold for Question 10 (Appendix D). A paper would be printed for the seniors to check for Question 20 (Appendix E), and Question 38 (Appendix F) because these two questions may be sensitive ones. The above mentioned four papers were printed in large, bold, clearly printed type which would be easy for most seniors to read.

At this point the questionnaire-interview was ready for use. The stages of the development and use of the questionnaire-interview will be presented in the Procedure section of this chapter. The questionnaire-interview was not printed in bold type because only the interviewer would be reading it.

Sampling

The population which was studied in this project was the non-institutionalized elderly in the Hamilton-Wentworth Region. It was decided that a randomly selected sample was needed. This meant that no name had any more chance of being selected than any other name.

The first attempt was made to secure this sample from the Old Age Security Data Base, Health and Welfare, Ottawa. A request was made to have a list of 280 names, addresses, and phone numbers of randomly selected elders in the Hamilton-Wentworth Region. This list would not include the names of

the institutionalized elders. Friendly telephone contact in this type of research increases the level of participation. This request was denied. There was new government legislation passed in July, 1988, which prohibited access to federal, provincial, and municipal files even for legitimate research.

A second attempt was made to secure the same list from the Assessment Department of the Hamilton-Wentworth Region. Three letters of support accompanied this request. They were from the Office of Gerontological Studies, McMaster University; College of Education, Brock University; and the Hamilton-Wentworth District Health Council. The request was refused.

The six municipalities in the region were contacted to access the names, addresses, and phone numbers of an appropriate sample group. This effort was also unsuccessful.

An alternative procedure was suggested by the Regional Assessment Department. It was suggested that computerized random sampling be carried out in order to get a list of 272 names of the non-institutionalized elderly in the Hamilton-Wentworth Region. This list would be kept by the Assessment Department. These seniors would be sent a letter of invitation to participate in this study and they could respond if they wished. It was felt that this was the best plan under the circumstances.

A letter was drafted, as well as a return card. The

letters and return cards were printed up in large, bold, clear type to facilitate reading by the seniors. The letter introduced, explained the study, and invited the seniors to participate in the research and mail back the card enclosed. The Chairman of the Region was glad to send the letter out on the Chairman's letterhead with his signature. The letter is in Appendix G and the card is in Appendix H. A self-addressed, stamped envelop was also included. The mailings went out from the Assessment Department. A specific computer program was set up to exclude all seniors in the region who resided in nursing homes, homes for the aged, retirement homes, rest homes, and lodging homes. From this remaining population, computerized random sampling was carried out to get a sample list of 272 seniors.

The population data base which was used was from census information (Ontario Ministry of Revenue), recorded in the enumeration completed in August, 1988. The total population of the Region was 435,791. The age was not known for 18,447 of this population. Because of this, the exact size of the senior population was not known. The total population of the known seniors in the region was 59,826, both institutionalized and non-institutionalized. The region has six municipalities. The known senior population split was Town of Flamborough, 2,487; Town of Dundas, 3,476; Town of Ancaster, 2,030; Township of Glanbrook, 903; City of Stoney Creek, 4,600; and

City of Hamilton, 46,330.

When a random sample list of 272 was completed, the municipalities were represented as follows: Town of Ancaster, 4; Town of Dundas, 8; Town of Flamborough, 4; Township of Glanbrook, 2; City of Stoney Creek, 22; City of Hamilton, 232.

The response rate was not known ahead of the mailing, so four mailings were requested. Each mailing included 68 seniors. Every fourth name was taken from the sample list of 272 with each mailing. The letters were mailed between late August, 1989 and early November, 1989.

Seventy-five response cards were returned. Five letters were returned unopened to the Chairman's Office with the stamp **moved** on them. Different reasons were given for not participating. Some seniors gave more than one reason. The reasons given were: not well, 24; not interested, 20; language problem, 2; moving to a rest home, 1; in hospital, 1; travelling out of the country, 2; death, 5; and no reason given, 2.

Twenty-five wanted to participate in this research. One senior cancelled the appointment for a home visit after it was made. One senior wanted to participate, but after one or two questions it was evident that he was very confused. Thanks were given and the home visit was ended. Twenty-three seniors participated in the research: 20 from the City of Hamilton, 2 from the Town of Dundas, and 1 from the City of Stoney Creek.

Procedure

When the response cards were returned, appointments for home visits were made at the participants' convenience. If there were any questions, they were answered at this time. Before the questionnaire-interview was given, the participants were asked to sign the consent form in Appendix I. All of the participants signed the concent form. This consent was printed in bold type. The questionnaire-interviews were then completed. They went smoothly. The time taken for the questionnaire-interviews was between 45 minutes and two hours. The average length of time taken was approximately an hour. Two participants took two hours. It was felt that it would jeopardize the quality of the data if these two were hurried in their responses. At the end of the home visits, the participants were given a paper so that they could request a summary of the research when it was completed. This paper is in Appendix J. This paper was printed in large, clear, bold print. The time limit of the data collection was recorded in Table 3.

Table 3

Stages of the Development and Use of the Questionnaire-Interview

Approximate Date	Activity
January, 1989	-Development of the first draft of questionnaire-interview. -Questionnaire-interview used with one senior.
February, 1989	-Revisions made to questionnaire-interview from the senior's suggestions.
March, 1989	-Letter with instructions was sent to experts (see Appendix B). -Questionnaire-interview was critiqued by 7 experts to establish content and face validity. The experts included 2 researchers, 1 epidemiologist and questionnaire expert, 2 experienced public health nurses, 1 gerontological nurse specialist, and the public health nursing supervisor of the seniors' program. -Revisions made from suggestions given by experts.
April, 1989	-Pilot testing completed. -Reliability was established by this testing with 5 seniors.
May to June, 1989	-Revisions made to questionnaire-interview from suggestions given by seniors in the pilot testing.
June, 1989	-Questionnaire-interview ready for use.
April to August, 1989	-Negotiations with Regional Assessment Department in relation to sampling procedures.

Table 3 (continued)

August to November, 1989	-Mailing of letters, return cards, and self-addressed envelopes to 272 non-institutionalized regional seniors (randomly sampled from the population of non-institutionalized regional seniors). Sent out in 4 lots.
September 8, 1989 to November 13, 1989	-Telephone contact with seniors who wanted to participate in the study.
	-Home visits to the participants, giving them the questionnaire-interview.
November to December, 1989	-Coding of data.
December 20, 1989	-Entry of data into computer at Brock University using computer software SPSS/PC.
January to February, 1990	-Processing data and printing results.

Analysis

Non-parametric qualitative and quantitative data were collected during the questionnaire-interview. These data were analyzed by the use of a descriptive statistical model. The analysis included compiling various lists and computing non-parametric correlations between participants' learning needs and interests and individual variables using the SPSS/PC analysis package.

Individual profiles of participants' learning needs and interests were done. The frequency of responses and ranking of learning needs and interests were listed. All intensities were grouped. The frequency of responses of learning needs and interests of the group of participants and the intensities were listed. A list of ranking of preferred sources in learning health topics, no categories given (Question 4) was completed. Two lists were made of learning behaviours of the participants in the last 12 months, including topics and sources. A list and ranking of preferred sources in learning health topics, categories given (Question 7) were completed.

Participant illnesses and health problems and the level of difficulty in carrying out the activities of daily living were listed. The participants' chronic illnesses were listed. Three other lists were made of additional participant comments, participant comments about the questionnaire-

interview, and the anecdotal notes of the interviewer.

Computer analysis was used to find correlations between variables. The correlation between participant weight problems and wanting to learn about weight control was computed. The participants added ten additional learning needs and interests. They are included in all lists, but they have not been included in the following computations. The following correlations have been calculated between the 74 learning needs and interests in Questions 1 and 2 and individual variables. The individual variables were rating of general health, illnesses and health problems, eyesight, inability to read newsprint, inability to read magazine print, inability to walk around the block, the inability to walk up or down ten stairs, sex, marital status, living arrangements, age, education, income, housing, ability to speak English well, and the ability to understand written English well.

It was decided to drop the category **other** (h) in Question 34, in order to get a clearer picture. Without the **other** category, the progressive levels of education were clear.

The power of the test was calculated with N = 23 out of a sample of 272. Using the procedures outlined by Myers (1966), the power of the test was estimated to be .85 based on a participant group size of 23 and a sample size of 272. The power of the test is an estimate of the probability of participant responses being an accurate representation of

sample responses.

Participant Group Description

During the questionnaire-interview, a great deal of information about the 23 participants was gathered. The participant group information will be given as it was collected in the questionnaire-interview, starting with Question 1.

Each participant expressed many learning needs and interests ranging from 22 to 72 of three intensities in both the life style section, Question 1, and the illness and health problem section, Question 2. The most popular topics were life style topics. (See Chapter IV.) One participant stated that he wanted to feel younger than he was.

The participant group preferred certain sources for learning health topics. (See Chapter IV.) Eighteen participants stated that they actively sought various health topics from various sources. This will be presented in detail in Chapter IV. Eighteen participants stated that they came across various types of health information from different sources. (See Chapter IV.)

The participant group individually rated their general health as excellent (5), good (10), fair (7), and poor (1). Twenty-two participants stated that they had illnesses and

health problems ranging in number from one to 20, and 19 stated that these illnesses and health problems presented some difficulty for them in carrying out their daily activities. Eighteen participants had from one to seven chronic illnesses, and five had no chronic illnesses. All 23 participants wore glasses or contact lens. Participants rated their own eyesight, with glasses, if needed, as excellent (4), good (10), fair (8), and poor (1).

Twenty-one participants were able to read newsprint and two were not able. Twenty-two participants were able to read magazine print and one could not. All 23 participants could hear normal talking tones. Three people wore hearing aids and 20 did not. Nineteen participants stated that they could walk around the block and four stated that they could not. Twenty-one stated that they could walk up or down 10 stairs and two stated they could not.

The participants used various means of transportation. Participants listed as many as they used. These were bus (14), drive their own car (12), driven in car by others (16), taxi (9), walk (15), D.A.R.T.S. (Disabled and Aged Regional Transportation System) (2), motorized scooter (2), plane (2), and train (1).

Fourteen participants stated that their average weekly consumption of alcoholic drinks was zero. Seven stated that their consumption was between one and four drinks per week.

One stated that his or her consumption was between 10 and 15 drinks per week. One stated that he consumed over 20 drinks per week.

Three participants stated that they smoked cigarettes and that they smoked 32, 25, and 6 cigarettes daily respectively. Nine participants stated that they felt their weight was 10 pounds over or under their desired weight. Seven stated that they were overweight by 40, 25, 20, 20, 18, 12, and 10 pounds respectively. Two stated that they were 15 and 10 pounds underweight respectively.

Seventeen participants reported that they did not take any non-prescription drugs and six stated that they took these non-prescription drugs: anacin, vitamin C, liver pills, stress tablets, aspirin, and tylenol. Only three people stated that they received services from community agencies: one from the Canadian Cancer Society, one from a Visiting Homemaker once weekly, and D.A.R.T.S., and one from Chedoke Hospital.

Thirteen participants were male and 10 were female. Thirteen were married and 10 widowed. Eighteen lived in a house and five in a general apartment. Eight participants lived alone, 13 with a spouse or partner, one with children, and one with other relatives. Twenty-one point seven percent of the participant group were in the 65 to 69 age range, 30.4% in the 70 to 74 age range, 26.1% in the 75 to 79 age range,

13% in the 80-84 age range, and 8.7% in the over 84 age range.

Sixteen participants were born in Canada. Seven were born outside of Canada and came to Canada in different years. One came from Scotland in 1952, one from Russia in 1951, one from Malta in 1948, one from Yugoslavia in 1928, and three from England in 1911, 1919, and 1921 respectively. Eighteen stated that their first language was English, one Russian, one Italian, one Maltese, one French, and one Croatian. All participants were caucasian.

All 23 participants spoke English well and 22 understood written English well. One person stated that she did not understand written English well because of poor vision. Various levels of education completed were reported. Three participants had some elementary school, two had completed elementary school, seven had some secondary school education, seven had a secondary school graduation certificate, two had some post-secondary school education, and three had completed college or university. Seven participants stated that they had completed other education: seven technical courses, one a business course, one Registered Nursing training, one a chartered accountant course, and one a banking course.

Two participants had a paid job and five did volunteer work. The participants named many occupations that they were in for the main part of their life. These are listed in Table 4. The participants were in different income brackets. Six

Table 4

Main Kind of Work Done in Life

Work	Frequency of Responses
House Work	4
Engineering	2
Stationary Engineering	2
Teaching	1
Nursing	1
Electrical Work	1
Secretarial	1
Banker	1
Industrial Management	1
Chartered Accountant	1
Office Management	1
Property Management	1
Factory Worker	1
Truck Driver	1
Clerk in Office and Store	1
Salesperson	1
Quality Control	1
Claims Adjustor	1

received from $600 to $999 per month, six from $1000 to $1499 per month, seven from $1500 to $1999 per month, two from $2000 to $2499 per month, and two over $3000 per month.

Nineteen participants added nothing to Question 39. Other comments were recorded under Additional Information in Chapter IV. Fifteen people gave positive comments when asked in Question 40 about the questionnaire-interview. Five gave no answer. Other comments are recorded under Additional Information in Chapter IV. The interviewer's anecdotal notes were recorded in Appendix K. All participants were co-operative and friendly. Four had very serious health problems, three had limps, two had some shortness of breath, and one stated he was extremely active and still played hockey.

The results of the study will be presented in Chapter IV.

CHAPTER IV

RESULTS

The purpose of this research was to describe the health-related learning needs and interests of seniors in the Hamilton-Wentworth Region. The results will be presented under the following headings: individual profiles of learning needs and interests; learning needs and interests; sources of information; relationship between illness, health, and learning needs and interests; relationships between other variables and learning needs and interests; and additional information.

Individual Profiles

Individual profiles are presented in Appendix L. It was apparent from these results that each participant had many learning needs and interests. The numbers of these needs ranged from 22 to 71 across individuals. There were varying intensities of these learning needs and interests. It was noted from the individual profiles that each participant reported needs and interests from both the life style section (Question 1) and the illness and problem section (Question 2). Table 5 included all of the expressed needs and interests.

Table 5

Identification of Learning Needs and Interests

Item			Frequency of Responses
1	(j)	Cholesterol and Fats in the Diet	23
1	(o)	Care of the Eyes	23
2	(a)	High Blood Pressure	23
1	(b)	Community Resources	22
1	(d)	Nutritional Requirements	22
1	(aa)	Safety in the Community	22
1	(bb)	Crime Against the Elderly	22
2	(b)	Heart Problems	22
1	(c)	Hazards in Air, Water, and Food	21
1	(g)	Diet and Heart Disease	21
1	(m)	Foot Care	21
1	(p)	Stress Management	21
1	(cc)	Proper Use of Medications	21
2	(c)	Stroke	21
2	(d)	Circulation Problems	21
2	(m)	Arthritis	21
2	(y)	Glaucoma or Cataracts	21
1	(a)	Normal Aging Process	20
1	(e)	Fibre in the Diet	20
1	(h)	Salt in the Diet	20
2	(ll)	Physical Disability	20
2	(mm)	Cancer or Leukemia	20
1	(f)	Use and Misuse of Vitamins	19
1	(i)	Calcium Requirements	19
1	(q)	How to Relax	19
1	(s)	Building Healthy Relationships	19
2	(f)	Intestinal Disorders	19
2	(t)	Diabetes	19
1	(l)	Exercise for Seniors	18
1	(u)	Adjusting to Change	18
1	(y)	Immunization for Seniors	18
1	(z)	Safety in the Home	18
2	(g)	Kidney Disease	18
2	(h)	Other Urinary Diseases	18
2	(i)	Problem Controlling your Bladder	18
2	(q)	Chronic Bronchitis	18
2	(cc)	Memory Problems	18
1	(k)	Shopping for Food on a Budget	17
2	(w)	Coping with Poor Hearing	17
2	(x)	Coping with Poor Vision	17
2	(oo)	Pain Control	17
2	(qq)	Elder Abuse	17

Table 5 (continued)

Item			Frequency of Responses
1	(t)	Maintaining Control	16
1	(v)	Assertiveness Training	16
2	(l)	Osteoporosis	16
2	(u)	Problems with Weight Control	16
2	(bb)	Mental Confusion	16
2	(dd)	Depression	16
2	(nn)	Insomnia	16
1	(n)	Dental Care	15
2	(e)	Ulcers	15
2	(k)	Back Problems	15
2	(n)	Rheumatism	15
2	(o)	Asthma	14
2	(ff)	Bad Nerves	14
2	(gg)	Dizziness	14
2	(jj)	Drug Abuse	14
1	(x)	Bereavement	13
2	(p)	Emphysema	13
2	(aa)	Mental Illness	13
2	(pp)	Body Temperature Problems	13
1	(r)	Sexuality and Aging	12
1	(w)	Avoiding Constipation	12
2	(s)	Anemia	12
2	(r)	Tuberculosis	10
2	(ii)	Alcohol Abuse	10
2	(j)	Venereal Diseases	9
2	(z)	Epilepsy	8
2	(ee)	Suicide	8
2	(hh)	Frequent Headaches	8
2	(v)	Problems Quitting Smoking	5
**1	(ee)	Breast Self Examination (out of 10)	4
**2	(kk)	Rape (out of 10)	4
**1	(dd)	Problems with the Menopause (out of 10)	1
*2	(rr)	Parkinson's Disease	2
*2	(rr)	Hardening of the Arteries	1
*2	(rr)	Skin Problems	1
*2	(rr)	Warts on the Upper Lip	1
*2	(rr)	Hearing a Pulse in My Ear	1
*2	(rr)	Ideal Meal Sizes	1
*2	(rr)	Foot Problems	1
*1	(ff)	Transportation	1
*1	(ff)	Allergies	1

*Topics added by the participants.
**Questions asked of females only.

It did not indicate the strength of the learning needs and interests. Some topics were reported more often than others. It was noted that 20 of the 30 most popular topics were life-style topics. (See Table 5.)

Learning Needs and Interests

Tables 6 and 7 list the frequency of responses from Questions 1 and 2. There was only one participant who answered Question 3. The participant wanted to know how he could feel younger than he was.

Sources of Information

The results of Question 4 have been summarized in Table 8, labelled Preferred Sources for Learning about Health Topics (Question 4). It was noted that the preferred sources were generally in printed form, as well as a few others.

Spearman correlation coefficients were calculated between Questions 1 and 2 and Questions 5 and 6; however, these analyses produced mainly non-significant correlations close to 0. This is most likely due to the general nature of Questions 5 and 6. The results of Questions 5 and 6 have been summarized in the sections following.

Table 6

Learning Needs and Interests (Lifestyle)

Item	Frequency of Responses NI	SI	MI	VI
Normal Aging Process	3	4	8	8
Community Resources	1	9	5	8
Hazards to Health in Air, Water, Food	2	3	6	8
General Nutritional Requirements	1	4	7	11
Fibre in the Diet	3	5	4	11
Use and Misuse of Vitamins	4	3	4	12
Diet and Heart Disease	2	4	5	12
Salt in the Diet	3	5	7	8
Calcium Requirements	4	3	6	10
Cholesterol and Fats in the Diet	0	2	7	14
Shopping for Food on a Budget	6	6	6	5
Exercise for Seniors	5	4	6	8
Foot Care	2	3	8	10
Dental Care	8	3	5	7
Care of the Eyes	0	3	4	16
Stress Management	2	3	3	15
How to Relax	4	5	2	12
Sexuality and Aging	11	1	5	6
Building Healthy Relationships	4	3	3	13
Maintaining Control in Your Life	7	2	4	10
Adapting to Change	5	7	7	4
Assertiveness Training	7	3	4	9
Avoiding Constipation	11	3	5	4
Bereavement	10	3	6	4
Immunization for Seniors	5	3	6	9
Safety in the Home	5	5	2	11
Safety in the Community	1	4	7	11
Crime Against the Elderly	1	2	5	15
Understanding Medications	2	3	4	14
*Problems with Menopause	9	0	0	1
*Breast Self-Examination	4	3	1	2
Miscellaneous (Other)	0	0	0	4

*Questions asked of females only.

Table 7

Learning Needs and Interests (Illnesses and Health Problems)

Item	Frequency of Responses NI	SI	MI	VI
High Blood Pressure	0	3	6	14
Heart Attack and Problems	1	1	2	19
Stroke	2	1	1	19
Circulation Problems	2	2	4	15
Ulcers	8	4	4	7
Intestinal Disorders	4	6	4	9
Kidney Disease	5	7	4	7
Other Urinary Diseases	5	4	7	7
Problem Controlling Bladder	5	3	7	8
Venereal Diseases	14	3	2	4
Back Problems	8	2	7	6
Osteoporosis	7	3	4	9
Arthritis	2	4	3	14
Rheumatism	8	4	6	5
Asthma	9	4	5	5
Emphysema	10	5	5	3
Chronic Bronchitis	5	9	3	6
Tuberculosis	13	3	2	5
Anemia	11	3	4	5
Diabetes	4	4	5	10
Problems with Weight Control	7	3	4	9
Problems Quitting Smoking	18	2	0	3
Coping with Poor Hearing	6	3	5	9
Coping with Poor Vision	6	1	6	10
Glaucoma and Cataracts	2	2	4	15
Epilepsy	15	3	2	3
Mental Illness	10	3	4	6
Mental Confusion	7	0	4	12
Memory Problems	5	2	7	9
Depression	7	4	1	11
Suicide	15	4	1	3
Bad Nerves	9	3	6	5
Dizziness	9	5	5	4
Frequent Headaches	15	0	5	3
Alcohol Abuse	13	2	4	4
Drug Abuse	9	1	4	9

Table 7 (continued)

Item	Frequency of Responses NI	SI	MI	VI
*Rape	4	1	2	2
Physical Disability	3	4	7	9
Cancer or Leukemia	3	6	4	10
Insomnia	7	3	8	5
Pain Control	6	5	6	6
Body Temperature Problems	10	3	5	5
Elderly Abuse	6	2	5	10
Miscellaneous (Other)	0	2	0	7

*Question asked of females only.

Table 8

Preferred Sources for Learning Health Topics (Question 4)

Source	Frequency of Responses
Books generally	9
Pamphlets in the community	7
Pamphlets in the doctor's office	7
Printed material	7
Newspapers	6
Magazines	5
Through group activities	4
Mailed pamphlets	2
Lectures in the community	2
Television	2
Radio	1
Family doctor	1
V.O.N. (Victorian Order of Nurses)	1
Video-tapes	1
Tel-Med	1
Courses given at schools	1
Journals	1
Personal Instruction	1
Studying	1
Interested but did not know how to find information	1

Eighteen participants answered Question 5, regarding actively seeking health information, with a yes and five answered no. In the second part of the question, the 18 who answered yes listed many health topics they had actively sought information about. They also listed many sources of this information. Six sought information on heart problems, three sought information on arthritis, two on nutrition, two on medications, two on urinary problems, two on diabetes, two on back problems, and two on foot care. Other health topics given were cholesterol level, stomach trouble, a bowel problem, a head problem, a kidney problem, elevated blood pressure, a circulation problem, tendonitis, dental problems, stress, pain control, self-healing, fibre in the diet, a skin problem, stroke, prostate trouble, speech, physio-therapy information, gout, and general health topics. The maximum number of health topics mentioned by one participant was five.

The information sources were given by the participants. Fifteen stated the source was their family doctor, eight said medical specialists, five said books, two said the library, two said chiropractors, and two said foot specialists. Other sources which were given were pamphlets, a diabetic clinic, a dentist, a stroke victim's group, an eye specialist, an occupational therapist, a physio therapist, hospital nurses, and one participant could not remember the source of the information.

Eighteen participants answered yes to Question 6, regarding **coming across health information**, and five answered no. In the second part of the question, the participants gave health topics and the information sources of these topics that they **came across.** Four **came across** general health topics, two **came across** non-specific topics, and one stated that he or she **came across** various topics. Other topics were community resources, safety and security, A.I.D.S. (acquired immune deficiency syndrome), elder abuse, child abuse, depression, diet and hypoglycemia, arthritis, heart problems, urinary problems, eyes, stress, diabetes, fibre, skin, foot care, smoking, drugs, speech therapy, physiotherapy, diet, vitamins, nutrition, cholesterol, and elevated blood pressure. The maximum number of health topics mentioned by one participant was three. Three participants answered no to both Questions 5 and 6. These participants gave no indication of health information seeking behaviour or **coming across** any health information.

The sources of information given in Question 6 were: seven identified magazines; six, medical specialists; five, their family doctor; five, newspapers; four, television; and two, books. Other sources given were the Community Information Service, a Visiting Homemaker, an eye specialist, pamphlets in the community, a podiatrist, the radio, and the mail.

Table 9 summarized the results of Question 7 and 8. One participant stated in Question 7 (x) that he would like information from lectures in the community if the facility was wheel-chair accessible. In like manner, he answered Question 8 (a) and 8 (b) with yes but qualified them by stating that the facility would have to be wheel-chair accessible.

Relationships Between Illness, Health and Learning Needs and Interests

When asked in Question 9 to rate their overall health ranging from excellent, good, fair to poor, the participants' answers were 5, 10, 7 and 1 respectively. When the correlation between Questions 1 and 2 and Question 9 were computed, the results were recorded in Table 10. There were three positive significant correlations and three negative significant correlations between the participants' learning needs and interests and their rating of their general health. These results suggested minimal relationships among these variables.

Many illnesses and problems have been identified by the participants. They are recorded in Table 11. Also the degree of difficulty that the specific illnesses and problems presented in carrying out the activities of daily living was recorded in this table. Some of the illnesses and problems

Table 9

Preferred Sources for Learning Health Topics

(Question 7 and 8)

Item	Frequency of Responses
Information from:	
Your family doctor	23
A hospital nurse - if you were in the hospital	23
A Victorian Order Nurse - if you had one	23
A St. Elizabeth Nurse - if you had one	22
A medical specialist	22
A public health nurse - if you had one	22
Pamphlets in the doctor's office	22
A nutritionist - if you had one	21
Dentists	19
Television	19
A druggist	19
Newspapers	18
Pamphlets in the community	18
A therapist - if you had one	18
Books generally	17
Magazines	16
Friends and relatives	14
The library, including books	13
The radio	13
Tel-Med	13
A senior's centre	13
**Lectures in the community	12
*Courses	7
Video tapes	6
Other sources	2

**Four stated that they would like general health topics in this form.

*Three stated that they would like general health topics in this form.

	Yes	No
Awareness of Tel-Med	14	9
Would attend evening lectures in the community	10	13
Would attend daytime lectures in the community	16	7

Table 10

Relationships Between Learning Needs and Interests and Overall Health

Question No.	Spearman Coefficient	Question No.	Spearman Coefficient
1 (a)	.09	2 (g)	-.11
1 (b)	.17	2 (h)	.26
1 (c)	-.47*	2 (i)	-.03
1 (d)	-.15	2 (j)	.05
1 (e)	-.18	2 (k)	.38*
1 (f)	-.16	2 (l)	.13
1 (g)	-.28	2 (m)	.08
1 (h)	-.11	2 (n)	.15
1 (i)	-.10	2 (o)	-.02
1 (j)	-.22	2 (p)	.05
1 (k)	.05	2 (q)	-.09
1 (l)	-.18	2 (r)	-.02
1 (m)	-.20	2 (s)	-.23
1 (n)	.00	2 (t)	.15
1 (o)	-.04	2 (u)	-.09
1 (p)	.03	2 (v)	-.20
1 (q)	.13	2 (w)	-.00
1 (r)	.38*	2 (x)	.00
1 (s)	.13	2 (y)	.17
1 (t)	.28	2 (z)	.22
1 (u)	.38*	2 (aa)	-.01
1 (v)	.20	2 (bb)	.05
1 (w)	.02	2 (cc)	.16
1 (x)	.00	2 (dd)	-.09
1 (y)	-.03	2 (ee)	-.08
1 (z)	-.41*	2 (ff)	-.19
1 (aa)	-.01	2 (gg)	.15
1 (bb)	-.49*	2 (hh)	.04
1 (cc)	-.23	2 (ii)	.07
1 (dd)	-.14	2 (jj)	-.03
1 (ee)	-.22	2 (kk)	-.23
2 (a)	.08	2 (ll)	-.26
2 (b)	.10	2 (mm)	-.21
2 (c)	.03	2 (nn)	-.14
2 (d)	-.12	2 (oo)	.16
2 (e)	.09	2 (pp)	.03
2 (f)	.17	2 (qq)	-.01

*Significant at $<$ .05.

Table 11

Illnesses and Health Problems

Item	Frequency of Responses				
	Problem	N.D.	L.D.	M.D.	G.D.
High Blood Pressure	7	7	0	0	0
Heart Attack or Problem	8	4	0	3	1
Stroke	4	1	0	2	1
Circulation Problems	8	1	1	4	2
Ulcers	0	0	0	0	0
Intestinal Disorders	5	1	0	2	2
Kidney disease	2	1	0	1	0
Other Urinary Diseases	3	1	0	1	1
Problem Controlling Bladder	3	0	0	1	2
Venereal Disease	0	0	0	0	0
Back Problems	12	3	3	2	4
Osteoporosis	3	1	0	2	0
Arthritis	13	3	4	3	3
Rheumatism	0	0	0	0	0
Asthma	2	0	1	0	1
Emphysema	1	0	0	0	1
Chronic Bronchitis	4	1	0	2	1
Tuberculosis	0	0	0	0	0
Anemia	1	0	0	0	1
Diabetes	8	5	1	1	1
Problems with Weight Control	8	3	3	0	2
Problems Quitting Smoking	1	0	0	0	1
Coping with Poor Hearing	11	5	3	2	1
Coping with Poor Vision	10	4	0	4	2
Glaucoma or Cataracts	7	5	1	0	1
Epilepsy	0	0	0	0	0
Mental Illness	0	0	0	0	0
Mental Confusion	1	0	0	1	0
Memory Problems	8	3	3	2	0
Depression	5	1	3	0	1
Suicide	0	0	0	0	0
Bad Nerves	2	0	1	1	0
Dizziness	4	0	1	2	1
Frequent Headaches	0	0	0	0	0
Alcohol Abuse	0	0	0	0	0
Drug Abuse	0	0	0	0	0
Rape	0	0	0	0	0
Physical Ability	7	2	1	2	2
Cancer or Leukaemia	1	1	0	0	0
Insomnia	4	2	2	0	0

Table 11 (continued)

Item	Frequency of Responses				
	Problem	N.D.	L.D.	M.D.	G.D.
Pain Control	2	0	0	2	0
Body Temperature Problems	5	4	0	1	0
Elder Abuse	0	0	0	0	0
Stress Management	4	2	1	1	0
Sexuality and Aging	2	1	0	1	0
Building Healthy Relationship Maintaining Control	1	0	1	0	0
Adapting to Change	2	0	1	1	0
Asserting Yourself	4	1	2	0	1
Avoiding Constipation	2	0	2	0	0
Bereavement	1	1	0	0	0
Crime Against the Elderly	0	0	0	0	0
Understanding Medications	1	1	0	0	0
**Problems with Menopause	0	0	0	0	0
*Parkinson's Disease	2	0	1	1	0
*Allergies	1	0	0	0	1
*Colds	1	0	1	0	0
*Hearing a Pulse in the Ear	1	0	0	0	1
*Warts on the Upper Lip	1	1	0	0	0
*Skin Trouble	1	0	1	0	0
*Foot Problems	1	1	0	0	0

**Question asked of females only.
*Illnesses and health problems added by participants.

Key: N.D. - No Difficulty
L.D. - Little Difficulty
M.D. - Moderate Difficulty
G.D. - Great Difficulty

interfered with the participants' ability to carry out their daily activities. The illnesses and problems most frequently stated were arthritis, back problems, coping with poor hearing, and coping with poor vision. Some participants stated that an illness or health problem was no longer a problem because of treatment. This was noted particularly with heart problems and elevated blood pressure. The participants' perception of the current status was recorded. No discussion took place on this.

Questions 1, 2, and 10 were computed. (See Table 12.) It was impossible to compute 14 of the 54 parts in Question 10 with the corresponding topics in Questions 1 and 2, due to the lack of variance. Twenty-two out of 40 learning needs and interests computed with the corresponding illnesses and problems had significant positive correlations. There were only two negative correlations which were close to zero. On looking closer, there was only one positive significant correlation between the parts of Question 1 which were computed with the corresponding parts of Question 10. These were lifestyle topics. There were 21 positive significant correlations between Question 2 learning needs and interests and the corresponding parts of Question 10.

Table 12

Relationships Between Learning Needs and Interests and Illnesses and Health Problems

Question No.	Spearman Coefficient	Question No.	Spearman Coefficient
1 (p)	.32	2 (q)	.53*
1 (r)	.28	2 (r)	--
1 (s)	.14	2 (s)	.31
1 (t)	.24	2 (t)	.59*
1 (u)	.19	2 (u)	.47*
1 (v)	.39*	2 (v)	.45*
1 (w)	.09	2 (w)	.67*
1 (x)	.15	2 (x)	.36*
1 (bb)	--	2 (y)	.46*
1 (cc)	.17	2 (z)	--
1 (dd)	--	2 (aa)	--
2 (a)	.35*	2 (bb)	-.09
2 (b)	.33	2 (cc)	.38*
2 (c)	.21	2 (dd)	.51*
2 (d)	.51*	2 (ee)	--
2 (e)	--	2 (ff)	.03
2 (f)	.35*	2 (gg)	.15
2 (g)	.39*	2 (hh)	--
2 (h)	.33	2 (ii)	--
2 (i)	.46*	2 (jj)	--
2 (j)	--	2 (kk)	--
2 (k)	.51*	2 (ll)	.50*
2 (l)	.40*	2 (mm)	-.02
2 (m)	.40*	2 (nn)	.54*
2 (n)	--	2 (oo)	.17
2 (o)	.44*	2 (pp)	.46*
2 (p)	.34	2 (qq)	--

* Significant at $< .05$.
--Unable to compute.

This pointed to a strong relationship between the identified learning needs and interests related to illnesses and health problems and the same identified corresponding illnesses and health problems. The number of illnesses and health problems each participant had is listed in Table 13.

There were 10 topics added by the participants to Questions 1 and 2 as topics the participants wished to learn more about. These topics were transportation, allergies, colds, hearing a pulse in your ear, warts on the upper lip, skin problems, hardening of the arteries, foot problems, and ideal meal sizes. In addition, two participants added the topic of Parkinson's Disease. These 10 topics were added to Question 10. Two items were excluded from this list because they were not health-related. These 10 topics listed above were not correlated with Questions 1 and 2. Three topics were not identified as problems by participants in Question 10. These were transportation, hardening of the arteries, and ideal meal sizes.

Eighteen participants had at least one chronic illness. The number of chronic illnesses per participant was from zero to seven. As seen in Table 14, many participants had arthritis, heart problems, elevated blood pressure, or diabetes.

Table 13

Number of Individual Participant Illnesses and Health Problems

Participant	Number of Illnesses and Health Problems
1	7
2	17
3	17
4	8
5	3
6	6
7	3
8	5
9	11
10	20
11	5
12	9
13	3
14	5
15	14
16	8
17	9
18	8
19	14
20	3
21	0
22	11
23	2

Table 14

Chronic Illnesses

Chronic Illnesses	Frequency of Responses
Heart Problems	7
Arthritis	7
Diabetes	5
Elevated Blood Pressure	5
Intestinal Disorder	3
Circulation Problems	2
Chronic Bronchitis	2
Stroke	2
Allergy	1
Throat Spasms	1
Bowel Problem	1
Bladder Problem	1
Abnormal Brain Waves	1
Urinary Disease	1
Depression	1
Emphysema	1
Obesity	1
Skin Problems	1
Parkinson's Disease	1
Glaucoma	1
Foot Problems	1
Back Problems	1

Relationships Between Other Variables and Learning Needs and Interests

There were 17 positive significant correlations between the participants' learning needs and interests and their eyesight (see Table 15). These results indicated a strong relationship between these two variables. The better the participants' eyesight was, the more learning needs and interests they had.

In Table 16 there were eight significant positive correlations computed between 74 learning needs and interests and the inability to read newsprint. There were three significant negative correlations between the same variables. From these results, there was a moderate relationship between learning needs and interests and the inability to read newspaper print. The participants who could not read newsprint had more learning needs and interests.

In Table 17 there were 27 positive significant correlations between the participants' learning needs and interests and the inability to read magazine print. From these results, it was apparent that there was a strong relationship between the participants' learning needs and interests and their inability to read magazine print. The participants who could not read magazine print had more learning needs and interests.

Table 15

Relationships Between Learning Needs and Interests and Eyesight

Question No.	Spearman Coefficient	Question No.	Spearman Coefficient
1 (a)	.16	2 (g)	.37*
1 (b)	-.09	2 (h)	.16
1 (c)	-.15	2 (i)	.13
1 (d)	.24	2 (j)	.43*
1 (e)	.46*	2 (k)	-.03
1 (f)	.32	2 (l)	.28
1 (g)	-.09	2 (m)	.14
1 (h)	.13	2 (n)	.05
1 (i)	.53*	2 (o)	.02
1 (j)	.02	2 (p)	.01
1 (k)	.38*	2 (q)	-.00
1 (l)	.27	2 (r)	.37*
1 (m)	-.06	2 (s)	.44*
1 (n)	.02	2 (t)	-.33
1 (o)	-.29	2 (u)	.08
1 (p)	.03	2 (v)	-.20
1 (q)	.08	2 (w)	.20
1 (r)	.13	2 (x)	-.30
1 (s)	.08	2 (y)	-.18
1 (t)	.20	2 (z)	.31
1 (u)	.41*	2 (aa)	.50*
1 (v)	.57*	2 (bb)	.15
1 (w)	.48*	2 (cc)	.40*
1 (x)	.15	2 (dd)	.45*
1 (y)	.00	2 (ee)	.58*
1 (z)	-.08	2 (ff)	.16
1 (aa)	.37*	2 (gg)	.26
1 (bb)	.06	2 (hh)	.14
1 (cc)	.22	2 (ii)	.16
1 (dd)	.08	2 (jj)	.03
1 (ee)	.09	2 (kk)	.08
2 (a)	.09	2 (ll)	.26
2 (b)	-.23	2 (mm)	.13
2 (c)	.14	2 (nn)	.12
2 (d)	.25	2 (oo)	.55*
2 (e)	.46*	2 (pp)	.25
2 (f)	-.04	2 (qq)	.01

*Significant at $< .05$.

Table 16

Relationships Between Learning Needs and Interests and Inability to Read Newsprint

Question No.	Spearman Coefficient	Question No.	Spearman Coefficient
1 (a)	.37*	2 (g)	.39*
1 (b)	.21	2 (h)	.22
1 (c)	.28	2 (i)	.36
1 (d)	.30	2 (j)	-.24
1 (e)	.00	2 (k)	.02
1 (f)	-.10	2 (l)	.32
1 (g)	.28	2 (m)	.24
1 (h)	.06	2 (n)	.04
1 (i)	-.07	2 (o)	.44*
1 (j)	.24	2 (p)	.09
1 (k)	-.26	2 (q)	.41*
1 (l)	.36*	2 (r)	-.26
1 (m)	.32	2 (s)	.07
1 (n)	.01	2 (t)	.32
1 (o)	.20	2 (u)	.34
1 (p)	.22	2 (v)	.65*
1 (q)	.28	2 (w)	-.04
1 (r)	-.30	2 (x)	.32
1 (s)	.26	2 (y)	.22
1 (t)	-.02	2 (z)	-.22
1 (u)	-.43*	2 (aa)	.05
1 (v)	-.39*	2 (bb)	.28
1 (w)	-.30	2 (cc)	-.05
1 (x)	-.05	2 (dd)	-.05
1 (y)	.34	2 (ee)	-.22
1 (z)	.14	2 (ff)	.44*
1 (aa)	-.13	2 (gg)	.06
1 (bb)	.22	2 (hh)	.17
1 (cc)	.24	2 (ii)	-.26
1 (dd)	.03	2 (jj)	.00
1 (ee)	.14	2 (kk)	.13
2 (a)	.24	2 (ll)	.34
2 (b)	.14	2 (mm)	.32
2 (c)	.14	2 (nn)	.44*
2 (d)	.22	2 (oo)	-.41*
2 (e)	-.22	2 (pp)	.06
2 (f)	.34	2 (qq)	.32

*Significant at $< .05$.

Table 17

Relationships between Learning Needs and Interests and Inability to Read Magazine Print

Question No.	Spearman Coefficient	Question No.	Spearman Coefficient
1 (a)	.33	2 (g)	.39*
1 (b)	.32	2 (h)	.39*
1 (c)	.22	2 (i)	.38*
1 (d)	.22	2 (j)	.00
1 (e)	.10	2 (k)	.00
1 (f)	-.08	2 (l)	.35*
1 (g)	.39*	2 (m)	.38*
1 (h)	.17	2 (n)	.38*
1 (i)	.00	2 (o)	.37*
1 (j)	.27	2 (p)	.39*
1 (k)	.00	2 (q)	.41*
1 (l)	.38*	2 (r)	.00
1 (m)	.40*	2 (s)	.00
1 (n)	.36*	2 (t)	.38*
1 (o)	.00	2 (u)	.35
1 (p)	.00	2 (v)	.39*
1 (q)	.00	2 (w)	.00
1 (r)	.00	2 (x)	.19
1 (s)	.27	2 (y)	.00
1 (t)	-.19	2 (z)	.00
1 (u)	.00	2 (aa)	.00
1 (v)	.00	2 (bb)	.33
1 (w)	.00	2 (cc)	.19
1 (x)	.00	2 (dd)	.34
1 (y)	.17	2 (ee)	.00
1 (z)	.36*	2 (ff)	.37*
1 (aa)	-.19	2 (gg)	.00
1 (bb)	.39*	2 (hh)	.00
1 (cc)	.32	2 (ii)	.00
1 (dd)	.00	2 (jj)	.00
1 (ee)	.00	2 (kk)	.00
2 (a)	.26	2 (ll)	.40*
2 (b)	.44*	2 (mm)	.39*
2 (c)	.42*	2 (nn)	.39*
2 (d)	.38*	2 (oo)	.00
2 (e)	.00	2 (pp)	.36*
2 (f)	.38*	2 (qq)	.35*

*Significant at $<$ .05.

In Table 18 there were five positive significant correlations out of 74 between the learning needs and interests of the participants and the inability to walk around the block. These results indicate moderate relationships between the inability to walk around the block and the participants' learning needs and interests. Participants who were unable to walk around the block had slightly more learning needs and interests.

There were 19 significant positive correlations between 74 learning needs and interests and the participants' inability to walk up or down 10 stairs (see Table 19). There were no negative significant correlations computed. On closer examination, it was noted that 18 of these significant positive correlations were between learning needs and interests related to illnesses and health problems and the inability of the participants to walk up or down 10 stairs. These results indicated that there were strong relationships between the participants' learning needs and interests related to illnesses and health problems and their inability to walk up or down 10 stairs. The participants who were unable to walk up or down 10 stairs had more learning needs and interests related to illnesses and health problems.

The correlation coefficients of Questions 2 (u) and 10 (u) with Question 22 were .49 and .69 respectively. Both of

Table 18

Relationships between Learning Needs and Interests and Inability to Walk around a Block

Question No.	Spearman Coefficient	Question No.	Spearman Coefficient
1 (a)	-.03	2 (g)	.10
1 (b)	.18	2 (h)	.17
1 (c)	.20	2 (i)	.14
1 (d)	.21	2 (j)	.35*
1 (e)	.18	2 (k)	-.20
1 (f)	-.12	2 (l)	.04
1 (g)	.33	2 (m)	.19
1 (h)	.11	2 (n)	.02
1 (i)	.07	2 (o)	.40*
1 (j)	.41*	2 (p)	.22
1 (k)	.17	2 (q)	.34
1 (l)	-.12	2 (r)	.30
1 (m)	.15	2 (s)	-.08
1 (n)	-.11	2 (t)	.34
1 (o)	.08	2 (u)	.33
1 (p)	.15	2 (v)	.28
1 (q)	-.04	2 (w)	.14
1 (r)	-.11	2 (x)	.16
1 (s)	.04	2 (y)	-.13
1 (t)	-.17	2 (z)	.15
1 (u)	.09	2 (aa)	-.04
1 (v)	-.17	2 (bb)	.01
1 (w)	-.06	2 (cc)	-.08
1 (x)	-.25	2 (dd)	.27
1 (y)	.19	2 (ee)	.15
1 (z)	.11	2 (ff)	.12
1 (aa)	.07	2 (gg)	-.11
1 (bb)	.38*	2 (hh)	.08
1 (cc)	-.14	2 (ii)	.33
1 (dd)	.24	2 (jj)	.12
1 (ee)	.23	2 (kk)	.19
2 (a)	.23	2 (ll)	.45*
2 (b)	.24	2 (mm)	.34
2 (c)	-.30	2 (nn)	.07
2 (d)	.10	2 (oo)	-.14
2 (e)	.06	2 (pp)	.15
2 (f)	.20	2 (qq)	.29

*Significant at $< .05$.

Table 19

Relationships between Learning Needs and Interests and the Inability to Climb Stairs

Question No.	Spearman Coefficient	Question No.	Spearman Coefficient
1 (a)	-.06	2 (g)	.48*
1 (b)	.19	2 (h)	.23
1 (c)	.01	2 (i)	.20
1 (d)	.19	2 (j)	.32
1 (e)	.12	2 (k)	.06
1 (f)	-.14	2 (l)	.40*
1 (g)	.35	2 (m)	.30
1 (h)	.46*	2 (n)	.33
1 (i)	.07	2 (o)	.45*
1 (j)	.30	2 (p)	.53*
1 (k)	.08	2 (q)	.43*
1 (l)	.21	2 (r)	.28
1 (m)	.22	2 (s)	.16
1 (n)	.17	2 (t)	.40*
1 (o)	.25	2 (u)	.43*
1 (p)	.28	2 (v)	.47*
1 (q)	.35	2 (w)	.20
1 (r)	.12	2 (x)	.24
1 (s)	.15	2 (y)	-.01
1 (t)	-.18	2 (z)	.37*
1 (u)	-.02	2 (aa)	.22
1 (v)	-.18	2 (bb)	.35*
1 (w)	.18	2 (cc)	.27
1 (x)	-.17	2 (dd)	.38*
1 (y)	.28	2 (ee)	.37*
1 (z)	.06	2 (ff)	.44*
1 (aa)	.02	2 (gg)	.15
1 (bb)	.28	2 (hh)	.28
1 (cc)	.30	2 (ii)	.30
1 (dd)	.27	2 (jj)	.15
1 (ee)	.31	2 (kk)	.27
2 (a)	.30	2 (ll)	.43*
2 (b)	.18	2 (mm)	.40*
2 (c)	.18	2 (nn)	.42*
2 (d)	.28	2 (oo)	.17
2 (e)	.06	2 (pp)	.45*
2 (f)	.30	2 (qq)	.40*

*Significant at $< .05$.

these correlations were significant and positve. There was a strong relationship between the identification of weight problems and a need to learn about weight control.

There were four positive significant readings of 74 correlations computed in Table 20. Three of these were questions asked of females only. The fourth one, osteoporosis, was a disease considered by many to be a disease of women. There was one negative significant correlation. It appeared that there was minimal relationship between sex and learning needs and interests with these participants.

There were 22 positive significant correlations between the participants' learning needs and interests and their marital status (Table 21). Thirteen participants were married and 10 were widowed. These results indicated a strong relationship between the participants' learning needs and interests and their marital status. The married participants had more learning needs and interests.

There were two negative significant and three positive significant correlations between the learning needs and interests of the participants and their living arrangements (Table 22). These results indicated that there was a minimal relationship between these variables.

There were 11 significant positive correlations computed out of 74 in Table 23. There was only one significant negative correlation out of the 74. On closer examination, it

Table 20

Relationships between Learning Needs and Interests and Sex

Question No.	Spearman Coefficient	Question No.	Spearman Coefficient
1 (a)	.08	2 (g)	.33
1 (b)	.21	2 (h)	-.16
1 (c)	.17	2 (i)	-.27
1 (d)	-.07	2 (j)	-.26
1 (e)	-.10	2 (k)	.18
1 (f)	-.14	2 (l)	.36*
1 (g)	.11	2 (m)	.19
1 (h)	.11	2 (n)	-.04
1 (i)	.11	2 (o)	.00
1 (j)	.30	2 (p)	-.27
1 (k)	-.10	2 (q)	-.05
1 (l)	-.04	2 (r)	-.21
1 (m)	.05	2 (s)	-.18
1 (n)	.16	2 (t)	.14
1 (o)	-.09	2 (u)	.33
1 (p)	-.16	2 (v)	.23
1 (q)	.07	2 (w)	-.45*
1 (r)	-.31	2 (x)	-.11
1 (s)	-.30	2 (y)	-.22
1 (t)	-.31	2 (z)	-.05
1 (u)	-.12	2 (aa)	.07
1 (v)	-.35	2 (bb)	.21
1 (w)	-.32	2 (cc)	-.09
1 (x)	-.20	2 (dd)	-.06
1 (y)	-.01	2 (ee)	-.04
1 (z)	.26	2 (ff)	.21
1 (aa)	-.06	2 (gg)	.21
1 (bb)	.10	2 (hh)	.28
1 (cc)	-.14	2 (ii)	-.20
1 (dd)	.82*	2 (jj)	-.13
1 (ee)	.78*	2 (kk)	.73*
2 (a)	-.06	2 (ll)	.22
2 (b)	.16	2 (mm)	.08
2 (c)	-.02	2 (nn)	.26
2 (d)	.01	2 (oo)	.06
2 (e)	-.22	2 (pp)	.07
2 (f)	.33	2 (qq)	-.03

*Significant at $< .05$.

Table 21

Relationships between Learning Needs and Interests and Marital Status

Question No.	Spearman Coefficient	Question No.	Spearman Coefficient
1 (a)	-.07	2 (g)	-.52*
1 (b)	-.25	2 (h)	-.26
1 (c)	-.12	2 (i)	-.36*
1 (d)	-.52*	2 (j)	-.30
1 (e)	-.45*	2 (k)	-.39*
1 (f)	-.30	2 (l)	-.38*
1 (g)	-.54*	2 (m)	.09
1 (h)	-.18	2 (n)	-.27
1 (i)	-.11	2 (o)	-.59*
1 (j)	-.18	2 (p)	-.70*
1 (k)	-.27	2 (q)	-.62*
1 (l)	-.40*	2 (r)	-.26
1 (m)	-.06	2 (s)	-.39*
1 (n)	-.27	2 (t)	-.31
1 (o)	-.03	2 (u)	-.21
1 (p)	-.12	2 (v)	-.46*
1 (q)	-.51*	2 (w)	-.02
1 (r)	-.39*	2 (x)	-.11
1 (s)	-.29	2 (y)	.05
1 (t)	.01	2 (z)	-.48*
1 (u)	-.04	2 (aa)	-.26
1 (v)	.19	2 (bb)	-.41*
1 (w)	-.22	2 (cc)	-.09
1 (x)	-.28	2 (dd)	-.06
1 (y)	-.24	2 (ee)	-.18
1 (z)	-.30	2 (ff)	-.37*
1 (aa)	-.02	2 (gg)	-.21
1 (bb)	-.13	2 (hh)	-.31
1 (cc)	-.56*	2 (ii)	-.41*
1 (dd)	.24	2 (jj)	-.32
1 (ee)	.17	2 (kk)	-.21
2 (a)	-.14	2 (ll)	-.13
2 (b)	-.31	2 (mm)	.01
2 (c)	-.52*	2 (nn)	-.37*
2 (d)	-.22	2 (oo)	-.25
2 (e)	-.31	2 (pp)	-.29
2 (f)	.03	2 (qq)	-.24

*Significant at $< .05$.

Table 22

Relationships between Learning Needs and Interests and Living Arrangements

Question No.	Spearman Coefficient	Question No.	Spearman Coefficient
1 (a)	-.08	2 (g)	.22
1 (b)	-.04	2 (h)	.22
1 (c)	.34	2 (i)	.13
1 (d)	.21	2 (j)	.32
1 (e)	.23	2 (k)	.03
1 (f)	.08	2 (l)	-.02
1 (g)	.18	2 (m)	-.26
1 (h)	.04	2 (n)	.05
1 (i)	-.06	2 (o)	.23
1 (j)	.12	2 (p)	.51*
1 (k)	.01	2 (q)	.17
1 (l)	.33	2 (r)	.25
1 (m)	.03	2 (s)	.32
1 (n)	.13	2 (t)	-.05
1 (o)	-.38*	2 (u)	-.15
1 (p)	-.20	2 (v)	.27
1 (q)	.14	2 (w)	-.00
1 (r)	.29	2 (x)	-.27
1 (s)	-.08	2 (y)	-.43*
1 (t)	-.35	2 (z)	.24
1 (u)	.06	2 (aa)	.28
1 (v)	-.18	2 (bb)	.14
1 (w)	.28	2 (cc)	.05
1 (x)	.11	2 (dd)	.02
1 (y)	-.17	2 (ee)	.20
1 (z)	.39*	2 (ff)	.17
1 (aa)	.09	2 (gg)	.05
1 (bb)	.31	2 (hh)	.09
1 (cc)	.37*	2 (ii)	.14
1 (dd)	-.20	2 (jj)	-.01
1 (ee)	-.19	2 (kk)	-.22
2 (a)	.11	2 (ll)	.08
2 (b)	.07	2 (mm)	.02
2 (c)	.29	2 (nn)	.22
2 (d)	.05	2 (oo)	.11
2 (e)	-.04	2 (pp)	-.02
2 (f)	-.21	2 (qq)	-.15

*Significant at $< .05$.

Table 23

Relationships between Learning Needs and Interests and Date of Birth

Question No.	Spearman Coefficient	Question No.	Spearman Coefficient
1 (a)	-.04	2 (g)	.45*
1 (b)	.04	2 (h)	.00
1 (c)	-.06	2 (i)	-.10
1 (d)	.16	2 (j)	-.02
1 (e)	.20	2 (k)	.39*
1 (f)	.09	2 (l)	.43*
1 (g)	.30	2 (m)	.21
1 (h)	.19	2 (n)	.38*
1 (i)	-.00	2 (o)	.22
1 (j)	.06	2 (p)	.27
1 (k)	.23	2 (q)	.22
1 (l)	.19	2 (r)	.06
1 (m)	-.04	2 (s)	.10
1 (n)	.26	2 (t)	-.02
1 (o)	-.24	2 (u)	.32
1 (p)	.11	2 (v)	.32
1 (q)	.34	2 (w)	-.08
1 (r)	.19	2 (x)	.10
1 (s)	.13	2 (y)	-.39*
1 (t)	-.22	2 (z)	.38*
1 (u)	.06	2 (aa)	.04
1 (v)	-.10	2 (bb)	.37*
1 (w)	.02	2 (cc)	.06
1 (x)	.09	2 (dd)	.25
1 (y)	-.01	2 (ee)	.18
1 (z)	.04	2 (ff)	.36*
1 (aa)	-.30	2 (gg)	.06
1 (bb)	.07	2 (hh)	.25
1 (cc)	.24	2 (ii)	.06
1 (dd)	.37*	2 (jj)	-.01
1 (ee)	.38*	2 (kk)	.32
2 (a)	-.09	2 (ll)	.08
2 (b)	.19	2 (mm)	.08
2 (c)	.32	2 (nn)	.42*
2 (d)	.16	2 (oo)	.23
2 (e)	-.14	2 (pp)	.44*
2 (f)	.01	2 (qq)	.18

*Significant at $< .05$.

was noted that nine of the 11 significant positive correlations were between learning needs and interests of illnesses and problem topics and age. It appeared from this group of seniors that there was a moderate relationship between learning needs and interests in illnesses and problem topics and age. In other words, the older participants were more interested in learning about illnesses and problem topics.

There were 30 out of the 74 correlations calculated which were significantly negative between the participants' learning needs and interests and their level of education (see Table 24). The (h) section of Question 34 was not included in the computation so that there was a natural progression in educational levels. There was only one positive significant correlation. All correlations were negative except one, and two positive correlations were close to zero. These results pointed to a strong relationship between the learning needs and interests and the level of education of the participants. The less well-educated participants had more learning needs and interests.

Five out of 74 learning needs and interests had significant correlations with income (Table 25). Three of these were positive and two were negative. These results suggested that there was only a minimal relationship between these two variables, especially with significant correlations,

Table 24

Relationships between Learning Needs and Interests and Education

Question No.	Spearman Coefficient	Question No.	Spearman Coefficient
1 (a)	-.11	2 (g)	-.44*
1 (b)	-.50*	2 (h)	-.24
1 (c)	-.10	2 (i)	-.48*
1 (d)	-.44*	2 (j)	-.29
1 (e)	-.52*	2 (k)	-.06
1 (f)	-.26	2 (l)	-.25
1 (g)	-.54*	2 (m)	-.33
1 (h)	-.30	2 (n)	-.21
1 (i)	-.25	2 (o)	-.72*
1 (j)	-.30	2 (p)	-.33
1 (k)	-.38*	2 (q)	-.84*
1 (l)	-.09	2 (r)	-.32
1 (m)	-.51*	2 (s)	-.24
1 (n)	-.22	2 (t)	-.57*
1 (o)	-.32	2 (u)	-.70*
1 (p)	-.33	2 (v)	-.37*
1 (q)	-.06	2 (w)	-.12
1 (r)	.03	2 (x)	-.38*
1 (s)	-.46*	2 (y)	-.34
1 (t)	-.24	2 (z)	-.32
1 (u)	-.17	2 (aa)	-.06
1 (v)	-.04	2 (bb)	-.14
1 (w)	-.02	2 (cc)	.11
1 (x)	-.09	2 (dd)	-.38*
1 (y)	-.42*	2 (ee)	-.32
1 (z)	-.20	2 (ff)	-.48*
1 (aa)	-.07	2 (gg)	-.13
1 (bb)	-.57*	2 (hh)	-.40*
1 (cc)	-.27	2 (ii)	-.56*
1 (dd)	-.06	2 (jj)	-.47*
1 (ee)	-.16	2 (kk)	-.13
2 (a)	-.12	2 (ll)	-.55*
2 (b)	-.37*	2 (mm)	-.45*
2 (c)	-.00	2 (nn)	-.42*
2 (d)	.48*	2 (oo)	-.01
2 (e)	-.40*	2 (pp)	-.44*
2 (f)	-.39*	2 (qq)	-.55*

*Significant at $< .05$.

Table 25

Relationships between Learning Needs and Interests and Income

Question No.	Spearman Coefficient	Question No.	Spearman Coefficient
1 (a)	-.06	2 (g)	-.02
1 (b)	-.17	2 (h)	.32
1 (c)	-.30	2 (i)	.11
1 (d)	-.26	2 (j)	.26
1 (e)	-.17	2 (k)	.18
1 (f)	-.32	2 (l)	-.12
1 (g)	-.46*	2 (m)	-.23
1 (h)	-.18	2 (n)	.06
1 (i)	-.20	2 (o)	-.03
1 (j)	-.32	2 (p)	.24
1 (k)	-.24	2 (q)	-.24
1 (l)	.24	2 (r)	.21
1 (m)	-.27	2 (s)	.27
1 (n)	-.14	2 (t)	-.13
1 (o)	-.11	2 (u)	-.42*
1 (p)	.02	2 (v)	.20
1 (q)	.36*	2 (w)	.29
1 (r)	.53*	2 (x)	.01
1 (s)	.05	2 (y)	.02
1 (t)	.12	2 (z)	.29
1 (u)	.11	2 (aa)	.44*
1 (v)	-.06	2 (bb)	.12
1 (w)	.19	2 (cc)	.17
1 (x)	-.04	2 (dd)	-.13
1 (y)	-.16	2 (ee)	.18
1 (z)	.09	2 (ff)	-.06
1 (aa)	.16	2 (gg)	.32
1 (bb)	-.25	2 (hh)	.11
1 (cc)	.08	2 (ii)	-.02
1 (dd)	-.28	2 (jj)	-.12
1 (ee)	-.26	2 (kk)	-.30
2 (a)	.24	2 (ll)	-.36
2 (b)	-.14	2 (mm)	-.15
2 (c)	.18	2 (nn)	.06
2 (d)	-.27	2 (oo)	.19
2 (e)	-.18	2 (pp)	-.27
2 (f)	-.09	2 (qq)	-.22

*Significant at $<$ .05.

both positive and negative.

Additional Information

All of the participants wore glasses. Because of this fact, the correlations with other variables could not be computed.

All participants could hear normal talking tones. Three of the 23 participants wore a hearing aid.

There were 19 participants who did not want to add anything when asked Question 39. One participant stated that it is important to have information related to safety and mobility, light switch devices were good, and that he was interested in self-injection of medication related to an allergy. Another person stated he was amazed that he was so happy and healthy at his age. One woman stated that there was a need for more nursing home beds, home care for seniors in their homes, meals on wheels, and that seniors should pay for services if they could. A fourth person stated that seniors were bothered by inflation but that they did very well.

When the participants were asked in Question 40 for comments about the questionnaire-interview, five gave no comments and 15 made positive comments. The three remaining comments given were: the questionnaire-interview made you aware of things to learn, that the interview was not an

education to him but many seniors needed education, and one participant questioned if this research would do him any good.

The anecdotal notes of the researcher are listed in Appendix K.

Summary

All participants had many learning needs and interests. Participants were more interested in some topics than others. The results of Questions 4 and 7 gave the participants preferences in the sources of educational material. Many participants had both sought and come across health information from various sources. Eighteen participants had at least one chronic illness.

There were strong positive relationships between the participants' learning needs and interests and actual illnesses and health problems. The variables which gave strong positive significant correlations with the participants' learning needs and interests were eyesight, marital status, and the inability to read magazine print. There was a strong positive relationship between the participants having a weight problem and wanting to learn about weight control. There were strong negative relationships between the participants' learning needs and interests and educational level reached. There were strong

positive correlations between the participants' learning needs and interests in illness and health problem topics and their inability to walk up or down 10 stairs.

There were moderately positive relationships between the age of the participants and their learning needs and interests in illness and health problem topics.

There were moderate positive relationships between the participants' learning needs and interests and their inability to walk around the block and their inability to read newsprint.

The results stated that there were minimal relationships between the learning needs and interests of the participants and the variables general health, living arrangements, sex, and income.

The chapter ended with additional information, including the wearing of glasses and hearing aids as well as the participants' additions to the questionnaire-interview, the participants' comments on the questionnaire-interview, and the anecdotal notes of the researcher. The implications of these results will be discussed in Chapter V.

CHAPTER V

DISCUSSION

The discussion will be presented under the following headings: interpretations of the results, issues arising from the study, representiveness of the participant group, limitations of the research, implications for practice, implications for research, and a summary.

Interpretation of Results

The most important result from this research has been that all participants had many learning needs and interests of varying intensities. The number range for each individual was from 22 to 71. This coincides with an assumption made before the research began that seniors have learning needs and interests expressed or unexpressed. Dewey (1916, 1938), Freire (1972), and Knowles (1980), as well as other adult educators, agree that it is important to assess learning needs and interests in the educative process. This was the main purpose of this research and this assessment was carried out, with the result that the participants expressed many learning needs and interests.

It is suggested that these learning needs and interests

are a response to the participants' own experiences in everyday life. This belief is common in adult education. It is an integral part of theorists such as Dewey (1916, 1938), Freire (1972), and Knowles (1984b).

A complete explanation of this main result is impossible because the participants were not asked for their reasons for wanting to learn more about the topics presented in Questions 1 and 2, or the topics they added themselves. There could be several explanations for the motivation behind these learning needs and interests. There were correlations between learning needs and interests and the participants' actual illnesses and health problems. Participants may feel that if they learn about the illnesses and problems they have they could change some health behaviour so that their illness or health problem would be cured, disappear, or progress slower. They may be concerned about future pain and suffering from these current illnesses. Similarly, they may want to learn about lifestyle health topics so that they could make necessary changes to their behaviour in order to avoid certain illnesses or health problems or improve those they have.

The participant may have a learning need or interest in certain topics because relatives, friends, or acquaintances have a certain problem or illness. There may have been increased media coverage of certain topics such as the importance of cholesterol and fats in the diet and avoiding or

minimizing heart problems. They may have been told that they were at risk related to certain conditions and so want to learn more about them to avoid them. Some seniors may have a fear of certain conditions and want information on how to avoid them. Some participants may be curious about a subject or have an intrinsic interest in it.

There was a strong significant positive correlation between participants' learning needs and interests in weight control and identifying a weight problem. A possible explanation is that by gaining information on how to control weight, the participant could adjust his or her weight in order to become healthier, look and feel better, and possibly fit clothes he or she has not worn for years.

All topics in the questionnaire-interview were of interest to one or more participants. One could conclude that the topics included in the questionnaire-interview were of interest to the elderly. Two-thirds of the most popular topics chosen by the participants were from the lifestyle section (Question 1). An explanation of this observation may be that participants believe that if they learned about these topics, they could change some health behaviours so that they could live longer and enjoy better health.

Most participants reported health information seeking behaviour either **actively sought** (18) or that they **came across** (18) and read or listened to the information given. The

participants who **actively sought** health information are probably people who are engaged in life-long self-directed learning as described by Knowles (1984a).

The maximum number of topics which any participant tried to **actively seek** information about or **came across** was five. There is a large difference between the number of learning needs and interests of the participants and the number of topics that information was **sought** or **came across.** Three participants neither **sought** health information nor **came across** it. The participants had many unmet learning needs from these figures. There appears to be an important step between wanting to learn and seeking information. In many instances one does not naturally follow the other. Some possible explanations follow. Some participants may not be convinced that seeking information on health topics would have any tangible reward. Some participants' health status and energy reserves may interfere with seeking health information. Some may not know where to get health information on the topics of interest. Transportation may present a problem to some. Other needs and priorities may be present, such as regular necessary activities of daily living like shopping, cooking, and cleaning. Some may have a more passive attitude toward learning and life. Some participants may not want to bother looking up call numbers at libraries or learning how to use computers that are used in libraries to access books and

materials.

There was a strong correlation between the learning needs and interests of the participants related to illnesses and health problems and the illnesses and health problems the participant actually had. This is not surprising. The explanation is probably that the participants believe that learning about their illnesses and health problems will help them to make the necessary changes in their life so that the illness will be cured or the progress of it slowed down. Health problems may also disappear in the same manner. Possibly pain will be stopped or eased and they will have a longer, more comfortable life.

An important observation is that not all illness and health problem topics, computed with the participants' actual illnesses and health problems, had significant correlations. Nine out of 31 did not. This may be because participants feel that they know enough about the topic because of previous learning. They may also believe that further learning will not help the condition. From the above statement it cannot be assumed that an elder who has an illness or health problem automatically wants to learn more. This has implications for health promotion practitioners in all areas.

There were strong significant positive correlations between the participants' perception of their eyesight and their learning needs and interests. An explanation could be

that the participants expected that learning various topics would entail a great deal of reading printed material and the ones with poor vision felt their eyesight was not good enough for it or that their eyes would tire too much. On the other hand, the lowest number of learning needs and interests of any individual participant was 22, and 21 participants were able to read newsprint and 22 were able to read magazine print. Nevertheless, the fear of eye strain or problems with their reading ability, due to limited vision, was probably a factor.

There were strong significant positive correlations between the participants' learning needs and interests and their inability to read magazine print. There was only one participant who stated that she could not read magazine print. She may feel that since she has not been able to read magazine print, the amount of health information she acquired had been very limited and so she had many learning needs and interests.

There were strong positive significant correlations between the participants' learning needs and interests related to illnesses and health problems and their inability to walk up or down 10 stairs. The probable explanation for this is that participants who cannot walk up or down 10 stairs are incapacitated to a large extent and probably have many illnesses and health problems and are interested in learning more about them so they could make appropriate behavioural changes to improve their health and comfort and live longer.

There were strong negative significant correlations between the participants' learning needs and interests and their education. The less educated had more learning needs and interests. This was a surprise. One would think that the better educated would have more learning needs. Some explanations follow. All elders are located on a health continuum and must be concerned about it. Interest in health may be of more universal concern than other topics to elders because they all have to cope with the aging process and probably one chronic illness.

Another explanation might be that the well educated had acquired a great deal of health information throughout their lives and they already had enough information on some topics. Another possible explanation is that the better educated may be in better health and not feel the need to learn as much about health, illnesses, and health problems. The better educated may be more selective in naming their learning needs and interests and so have fewer of them. An obvious explanation is that the less educated felt they knew less about health information and so wanted to learn more.

There were strong positive significant correlations between the marital status and learning needs and interests of the participants. The married participants had more learning needs and interests. A possible explanation is that married seniors probably have a wider circle of relatives, friends,

and associates to be concerned about and interested in and this could increase their interest in any of the topics. Their husband or wife may be a diabetic and depressed. Another possibility is that the married couple probably discuss health topics and become more interested in them. They probably give each other support and encouragement to learn about health topics in order to keep well and active and live longer.

When asked in Question 4, an open-ended question, for their preferred sources of health information, the participants gave many sources. The most popular were in the written form. In contrast to these answers, the participants gave many preferred sources in Question 7, when presented with a list, but the most preferred sources were generally health professionals followed by written material, community programs, and friends and relatives. Possible explanations follow. On the spur of the moment, many possible sources did not come to the mind of the senior. The participants may not have identified doctors and various professionals as health educators and consequently not mentioned them in Question 4.

The preferred list from Question 7 is heavily weighted at the top with health professionals. These are generally one-to-one contacts. This is an extremely expensive enterprise and the current health budget cannot handle this kind of education for all the elderly.

Over half of the participants (13) stated that they would not attend lectures or courses in the community in the evening. The reasons for this result may be that transportation may be a problem, the seniors do not like night driving, fatigue, and fear because they are a vulnerable population for attack and robbery. Several (7) stated that they would not attend lectures or courses in the community either in the day or evening. They may have transportation concerns, not be a person who enjoys groups, or not be convinced that attendance would benefit them in any way.

There was a moderate positive significant correlation between the participants' inability to read newsprint and their learning needs and interests. An explanation could be that those who cannot read newsprint feel that they have not been able to read health literature and so their learning needs and interests now are many.

There were moderate positive significant correlations between the participants' learning needs and interests and the participants' inability to walk around the block. If the participant could not walk around the block, he or she probably had several other illnesses and health problems and wanted to learn more about them to cure them, slow their progress, or reduce pain and suffering.

There were moderate significant positive correlations between the participants' learning needs and interests related

to illness and health problem topics and age. A reasonable explanation for this is that as an elder ages, he or she acquires more illnesses and health problems and so wants to learn about these topics in order to change his or her health habits so that illnesses will be cured or the progression of them will be slowed down, or pain and suffering will be reduced or avoided. By these means, the quality of life will improve and life will be lengthened.

There were minimal significant correlations between the participants' learning needs and interests and their perception of their overall health, living arrangements, income, and sex.

Issues Arising from the Study

There were many unanswered questions as a result of this research. It was observed during the questionnaire-interview that some seniors appeared to need some help in identifying (expressing) their learning needs and interests. At the beginning of Question 1 there was some confusion as to what the interviewer was asking. As soon as the reading of the topics began there was no confusion. Part of this problem may be that the seniors did not understand the language or that the information sought is less tangible than questions such as "Do you need assistance with cleaning?" A third explanation

might be that the seniors are just not accustomed to being asked these kinds of questions.

It was also noted during the questionnaire-interview that as it progressed many people asked the interviewer where they could learn about health topics. The questionnaire-interview gave the participants a chance to think about their learning needs and interests related to health.

Another question that came to mind was "How do these learning needs and interests fit in with other perceived needs (overall needs)?" It is felt that the prioritizing of existing needs dictates which ones will be attended to first or not at all.

Another question that came from the study was "Are the learning needs and interests related to health different for men than women?" It is felt that they are not significantly different except for the obvious differences in anatomy and physiology.

After reading this study, one might ask "Are the seniors learning needs and interests related to health different from other adults?" It is possible that they are. It is felt that there will be differences. These differences will probably be related to the number of illnesses and health problems the two groups have. It is felt that the adult population under 65 years old will have fewer illnesses and health problems and so not be as interested in these topics. In the pre-retirement

years, the adults will be busy with their occupations and growing families. Because of this, they may not identify as many learning needs and interests related to health. Many may be interested in learning about lifestyle health issues. Many may not be thinking about aging, illness, or their mortality and so not be interested in these topics.

Following the above question comes the question "How does health promotion for the elderly fit in with health promotion for the rest of the adult population?" It certainly has relevance because the health of adults and their health behaviour has a great influence on their health in later years. Adults need to learn the implications of their health practices. Many illnesses can be prevented. For this reason, health promotion activities should be designed for all age groups throughout the life cycle. There should be continuity in planning health promotion for the life span.

Another question that comes to mind is "Are the learning needs and interests different for seniors outside of the Hamilton-Wentworth Region?" It is suggested that they will not be significantly different across Canada except for native Indians and Eskimos. The reason given is that we generally share a common culture and we will all have some learning needs and interests related to health. It is suggested that beliefs and attitudes toward health will be different for the native Indians and Eskimos related to their individual

cultures. There may be some similarities in results in other countries.

The next question in this section is "Will the learning needs related to health of the elderly change dramatically?" It is felt that the total group of the elders' learning needs and interests is changing slowly, related to the increasing population of elders and technological advances. Because of this gradual changing, re-evaluation will be needed. The senior's learning needs and interests can change quickly. Examples are having a major heart attack or being diagnosed as a diabetic. Learning needs and interests will change in relation to the individual's physical status. The question comes to mind "Can health promotion activities be planned now to match learner needs now and in the near future?" It is felt the answer is **yes** because the entire elderly population has learning needs and interests and these learning needs and interests will probably remain fairly stable for a number of years.

"How does this research relate to the institutionalized elderly in the Hamilton-Wentworth Region?" It is felt that those in institutions will have fewer learning needs and interests because some or all of the former health responsibilities of the seniors are being performed by caregivers.

The question is posed, "Should the questionnaire-

interview be changed for future use?" It is felt that the basic layout was good. A few changes could improve it. **Skin care** could be added to Question 1. The list of topics in Questions 1 and 2 does not need to be exhaustive because the seniors have the opportunity to add their own topics at the end of each question.

Question 14 should have only the newsprint section because there is not enough difference in the size of print in newspapers and magazines.

Representativeness of the Participant Group

The reader may ask "Is the participant group similar to the entire population of non-institutionalized elders in the region and if they are, would their learning needs be different?"

Age is the first characteristic examined. The total population of known elders in the region is 59,826, including both institutionalized and non-institutionalized. Since the number of institutionalized is not known, a comparison will be made between the participant group and the number 59,826 for discussion purposes. In the 65 to 69 age group, the percent of the participant group was 21.7% and the regional group 34.9%. In the 70 to 74 age group, the percent of the participant group was 30.4% and the regional group 23.2%. In

the 75 to 79 age group, the figures were 26.1% and 19.2% respectively. In the next age group, 80 to 84, the figures were 13.0% and 12.2% respectively. Lastly, the figures for the over 84 age group were 8.7% and 10.5% respectively. From these statistics it appears that the age ranges are similar.

Using the same population figure of 59,826, sex was considered. In the region there were, according to the data base used, 42.4% men in the population and there were 60.9% men in the participant group. This is a substantial difference. From this research there were only minimal relationships between sex and learning needs and interests. This discrepancy related to sex should not be a major concern.

Income was the next characteristic considered. It is felt that the participant group had a higher income than the entire elderly population under study. Eighteen lived in a house which they probably owned and the incomes reported were probably higher than the entire non-institutionalized elderly population in the region. Many seniors live on incomes below the poverty level. In the present study there were only minimal relationships between learning needs and interests and income. All participants appeared to be meeting their basic financial needs. Many in the region are probably not doing this. One might ask "Would this situation make a difference in their learning needs and interests?" It is suggested that seniors trying to keep food on the table would not be

interested in learning many topics such as the use and misuse of vitamins. Their learning needs and interests would be fewer in number and be topics basic to survival.

The next characteristic to be considered is the ability to read English. There are many Canadian-born elders who are functionally illiterate. These seniors' learning needs and interests could be similar to the entire elderly population but it presents a problem to practitioners to discover them and to respond with health promotion in a non-written form. A verbal interview would be needed like the questionnaire-interview in this study.

The ability to speak, understand, and read English is the next characteristic looked at. Many elders in the region speak or understand little English and are unable to read English to any extent. These seniors probably have different health beliefs and attitudes related to a different culture as well. Their learning needs and interests will probably be somewhat different. The problem is that it will be difficult to discover their learning needs and provide appropriate learning resources in their language. Some are available, but they are limited.

The last characteristic to be considered in this section is general health. All participants except one identified from 2 to 20 illnesses and health problems and 18 had at least one chronic illness, some having as many as seven. In spite

of this, 15 participants stated their health was good or excellent. It appears from this study that health co-exists with illness. It is felt that the general health of the participant group is similar to the larger senior population under study.

Limitations of the Research

The first limitation of this research is that the participant group is probably different than the sample of 272 elders. This is called participant bias. One difference is that all participants spoke English well and at least two and probably several more from the sample did not. Two stated on the return cards that language prevented them from participating. Twenty-two participants understood written English well. Since there are many illiterate Canadians and immigrants in the region, it is reasonable to assume that many elders cannot understand written English well.

Another difference is that all participants were interested in the topic and research. Twenty of the sample group were not interested and likely more. Twenty response cards stated that the elder was not interested in the research.

The next difference is that some people are more apt to want to participate in projects and research so that they can

assist if they can.

The question which follows from this first limitation is "Would the research results be different if a higher percent of the sample had participated?" It is felt that there would have been some differences but that these would not be great, taking the group as a whole. An interpreter would be needed for foreign-speaking elders.

The second limitation is that the participant group was only 23. In spite of the limited number of participants, the amount and depth of information made up for this limitation to some degree.

The third limitation is called the social desirability response set. The participants usually try to answer the question in a socially accepted way.

The fourth limitation is that the questionnaire-interview was developed by the researcher and so the readers are cautioned and encouraged to consider the instrument's reliability and validity. The reliability and validity have been dealt with extensively in this study.

An important question to ask is "Can conclusions drawn from the participant group in this study be generalized to the sample and also to the larger regional non-institutionalized elders?" A moderate degree of external validity was established by the power of the test. The answer to the above question is yes, with caution.

Implications for Practice

There are many organizations and people involved in teaching health-related topics to the elderly in the Hamilton-Wentworth Region. Some of these are health professionals, adult educators, societies related to particular illnesses, seniors' centres, seniors' groups, community programs of various kinds, producers of radio and television programs, libraries, authors, newspaper and magazine journalists, as well as the federal, provincial, and municipal governments. This research has implications for all those who are producing and delivering health promotion activities and resources to the non-institutionalized elderly. The number of these health educators is large.

From this research it was evident that the elderly in the study had many learning needs and interests of varying strengths, related to health. Some topics were more popular than others. It is suggested that these results are moderately representative of the number of learning needs and interests related to health of the elderly in the region. Following this line of thinking, there must be a phenomenal number of learning needs within this non-institutionalized group. The proportion of elderly in the population is growing. It is concluded that there will be more health-related learning needs and interests than there are at the

present time in the elderly population.

Some of these learning needs and interests are being met. In the present study many participants were actively seeking information or coming across it. These seniors are self-directed learners. Many learning needs and interests are unmet. In the present study, the lowest number of learning needs was 22 and the highest number of information-seeking behaviours in the last year was five. This leaves a minimum of 17 needs which were unmet. This picture is duplicated approximately 45,000 times in the region.

Health educators of all kinds are advised to learn the principles, strategies, and the techniques of adult education that adult educators, such as Malcolm Knowles (1984a), have found effective in teaching adults. Only a few outstanding ones will be briefly restated now. The learner should control the learning and participate at all levels (Dewey, 1916, 1938). He continued by saying that the teacher facilitates and guides. Freire (1972) emphasizes mutual planning in the learning process. Knowles (1980) stated that it is important to help the learner to become self-directed. Adult educators generally agree that it is important to assess the learning needs and interests of the learners before planning any educational activity.

This research provides valuable information on needs assessment and the results could be used directly in practice.

The development of the questionnaire-interview was research-based, as was the entire study.

All health professionals and educators need some kind of instrument to assess the learning needs and interests of the would-be learners. If a health educator has a specific population to serve, such as a senior citizen's apartment building, Questions 1 and 2 of the questionnaire-interview could be used as an assessment instrument in its present form. The use of the strengths of the needs could help the educator to prioritize the topics chosen. Other parts of the questionnaire-interview would help the educator discover preferences in delivery form, place, and time. Health promotion activities should be set up after this assessment.

Community nurses could use the same parts of the questionnaire-interview with their clients and patients. An educational plan could then be mutually set up and completed. An important point is that a person may have a disease but not want to learn any more about it. This research indicates that there is a good chance they do, but it is important not to assume this direct relationship.

Health information is printed by many health educators, including the three levels of government and individual groups such as the Shoppers Drug Mart. As stated above, these health educators could use information from this research directly or gather their own using appropriate instruments. As an ongoing

learning needs assessment mechanism, material could include an address or phone number for consumers to write to or phone, in order to give feedback related to the materials produced, the topics chosen, and other desired topics. This could be included in all promotion. Specific examples are television and radio programming, Tel-Med services, library services, newspapers, magazines, and government departments.

Ongoing re-evaluation of original assessments of learning needs and interests is advised.

Seniors may need help in identifying their learning needs and interests. Some difficulty in this area was found in this research. Knowles (1980) states that it is important to help learners diagnose their own learning needs. How will this help be given when it is needed? It was found in this research that the use of the questionnaire-interview gave the necessary help. This could be used in various situations such as a wellness centre. This will be described later in this section.

It is important to link elders with available resources. Knowles (1980) emphasizes the importance of matching the learning needs and interests of adults to resources. It is difficult to define the potential user group of health promotion activities and materials. The demand for health promotion educational resources, both personnel and other materials, does not equal the learning needs and interests of

the would-be learners. Because of this situation, it is difficult to plan for community health care, including health promotion.

The next question is: Do the present health promotion personnel and other resources meet the need of elders for health information? It is felt that the answer is "no" because many unmet learning needs of the elderly exist. The number of clients and patients visited by community nurses would be a few thousand. None of the participant group in this study was currently being visited by community nurses. Case-loads are usually high in district nursing and this leaves little or no time for nurses to set up health promotion groups for the elderly. It is felt that probably over 40,000 elders in the region are receiving little or no health information from health professionals except from their doctors. Doctors give health information, but generally the curative function of that profession is stressed and time is limited.

This research indicated that elders preferred health information from professionals. This creates a dilemma because the present number of professionals have limited time for this important activity. It would seem that additional cost-efficient services are needed.

The elderly are a very heterogenous group. Some differences, important to education, relate to activity level,

age, health status, income, ability to read and speak English, types of learners, attitudes and beliefs, and the dependent-independent continuum of learning.

Access to health information is everybody's right and so it is important to find appropriate ways to disseminate it. Many elderly require educational material that is designed especially for elders. The reason is related to the normal aging process. Examples are that many need larger print because of limited vision and higher volume because of hearing loss.

Access to health promotion materials and personnel is the next important issue. It is important for seniors to know where the information is located and that user-friendly procedures for gaining access are in place. Many seniors do not know where to find health information. In this research some participants stated this.

It is important to link self-directed learners directly to resources (Knowles, 1980). Self-directed learners can then acquire their own educational materials. Illich (1973) advocated learning networks outside of any institution so learners can reach their defined goals. He argued that it is important to have references to educational materials and also that peer matching is helpful. Many elders are now getting the information they need and want.

On the other hand, it is postulated that many are not.

Two practical suggestions follow. A consumer's guide to health information could be produced for seniors which lists various health topics and where the resources are located and how seniors can gain access to them. The access procedures need to be appropriate to this age group. This guide could be printed in various languages. Health promotion personnel and materials in different languages are limited. Shut-ins could use a mail-order service listed in this guide book. Every senior could receive a copy of this guide, possibly with their pension cheques. An example of this type of guide is The Consumers' Guide to Health Information (Gann, 1986).

The second suggestion is having wellness centres, which could be one-stop access points where the seniors can gain access to many of their health care needs. These centres could be staffed by public health nurses and many of the seniors themselves. Seniors who wished some counselling about their general health care needs or help to identify their learning needs and interests related to health could get it there. The functionally illiterate elders would have to have verbal assessments of learning needs and interests. The questionnaire-interview used in this study could be used. Health information would have to be delivered in a non-written form. Seniors could access health information and resources at the centres or be directed to appropriate sources. Health-related learning needs and interests could be assessed using

Questions 1 and 2 from the questionnaire-interview used in this study. Other questions could be used to ascertain how and when the seniors wish to receive the health information.

Individual or group health promotion activities could be set up according to the assessments made. Peer counselling or matching could be set up and the groups could be run by the seniors themselves, if possible. These wellness centres could be located in shopping malls, which are places most seniors frequent. Seniors could be involved in the planning of the wellness centres from the beginning. Computer access to authoritative health information could be part of the centres, using user-friendly equipment. Assistance with learning how to use the computer could be part of the planning for the centres. Hand-out health literature could be available. There could be any number of other cost-effective plans to link learners to resources.

The Ottawa Charter for Health Promotion (Health and Welfare Canada, 1986b) stated that health services must move in the health promotion direction, beyond their responsibilities for providing clinical and curative services, and so enable people to learn throughout life.

Planning and producing health promotion resources and activities for a community are difficult tasks. Responses by the elders themselves may or may not be great. It is likely that there will be greater response by the elders if their

perceived learning needs and interests are assessed and used in the planning and producing of health promotion activities and resources.

As stated in Achieving Health for All (Health and Welfare Canada, 1986a), the aim of health promotion is to enable people and communities to increase control over and to improve health.

Implications for Research

This study has used a research-based methodology. It could be repeated at any time in this region or other areas. It could be used in its entirety or in part.

It is suggested that the most important research to be done could be labelled "Putting the pieces together in facilitating health-related learning by the elderly." This research would be a large enterprise. It would go through all the stages of learning from the seniors identifying their learning needs and interests, to behavioural changes if needed, and ending with as high a level of health as possible for the seniors. This research has addressed the perceived health-related learning needs and interests and how to assess them. Other research has addressed other parts of the seniors' health-related learning.

Some suggestions for specific areas of inquiry will

follow. Further research is needed to study the unmet learning needs and interests which have been identified in this study. Why are they just sitting there? Which learning needs get addressed first? Are personality factors important in whether these learning needs and interests receive attention?

Another question which needs to be studied is: How is health information presently delivered to the elderly and is the delivery system using adult education principles, techniques, and strategies?

The next question would be: Have current health promotion programs assessed the would-be senior learners' needs and interests before setting up health promotion activities and resources? This research underlines the importance of this step.

What is the best way of helping seniors identify their learning needs and interests? When these are identified, learning can proceed.

An appropriate piece of research following this study would be to see if professionals ascribe the same learning needs and interests to the elderly as they have themselves. If these are very different and professionals have been designing programs on their perceptions only, a problem will be identified.

The next question to study is: How do seniors obtain and

use information now? The next question, which is closely related, would be: Is the present access to information system appropriate for seniors' use or has it been designed for the use of the general adult population? It is suggested here that seniors may need a different access system. This may be a contributing factor in whether or not seniors actively seek health information.

What information do seniors consider authoritative? They will probably seek and use only the information they consider authoritative. This would be an important area for inquiry. What are the beliefs and attitudes of seniors related to health and health practices and do these beliefs facilitate or interfere with learning health information? Beliefs and attitudes have a great influence on a person's behaviours.

Are the health-related learning needs and interests of the elderly different from the general adult population? It has been suggested earlier in this study that there may be a difference. If there is, health promotion resources should be designed differently for the elderly.

Why do seniors want to learn health information? This is presented as an important question to answer. It may give valuable information which may help explain why there are unmet learning needs and interests.

Similar research could be carried out with the institutionalized elderly in the Hamilton-Wentworth Region.

This study could be used as it is or with some adjustments. Individual institutions could undertake an assessment of the health-related learning needs and interests of their residents. Questions 1 and 2 could be used for this purpose.

Are the health-related learning needs and interests of the elderly different for elders outside the Hamilton-Wentworth Region? This is an important question for all those adult educators who are involved with health promotion and the elderly. It is suggested that this study could be used directly outside this region or repeated using the same methodology.

The next question that relates to future research rising from this inquiry is: How do the health related learning needs and interests of the elderly fit in with other perceived needs or the overall needs profile of elders? The learning needs may be survival needs or higher level needs. The research question is important because some needs are attended to first and others set aside for the time being.

The elderly have experienced many life cycle events and gone through developmental stages. There are many theories of aging. The research question that follows this study is: How do these theories of aging relate to the elders' health-related learning needs and interests?

The last research question is very important. What is the best way to nurture the attitude of inquiry and learning

in the elderly? This nurturance is a backbone of adult education theory as well as the encouragement of self-directedness in adult learning (Knowles, 1980). A high level of self-directedness in learning enables adults to assume much of the responsibility for their own health.

Summary

A research-based methodology has been created in this study.

Many health-related learning needs and interests have been identified. They were of varying intensities. Some of these learning needs and interests were more popular than others. Two-thirds of the most popular topics were lifestyle in nature. Some health seeking behaviours of the participants in the last 12 months were identified. It was evident that there were many unmet health-related learning needs and interests. They were just sitting with the participants.

There were different information source preferences recorded in differently worded questions.

Strong significant positive correlations were found between the participants' health-related learning needs and interests and their eyesight, inability to read magazine print, and marital status. There was a strong positive significant correlation between the participants' need to

learn about weight control and identifying weight as a problem.

There were strong significant positive correlations between the participants' learning needs and interests related to illnesses and health problems and their actual illnesses and health problems and their inability to walk up or down ten stairs.

There was a strong significant negative correlation between the participants' learning needs and interests and the level of their education.

The power of the test was calculated to be .85. Some generalization of results to the total non-institutionalized elderly population in the Hamilton-Wentworth Region was made with caution.

The elderly deserve society's best effort to facilitate their efforts to achieve high levels of health. In 1982 the World Health Organization expressed commitment to the elderly by emphasizing the goal of adding years to life (cited in Dhillon, 1989). A new statement which was more important was added more recently: **Adding Life to Years.**

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Appendix A

Questionnaire-Interview

QUESTIONNAIRE-INTERVIEW

INTRODUCTION:

Hello, my name is *Mary Joan Bradley* (refer to making the appointment).

Thank you for letting me talk to you.

We are gathering information from senior citizens in order to gain a better understanding of the learning needs and interests related to health of seniors throughout the Hamilton-Wentworth Region. In other words, **"Do you want to learn about health topics or not? If you do wish to learn - which topics would interest you most?"**

The definition of health used here is an optimal level of functioning related to the aging process including physical, mental and social well-being.

This questionnaire-interview is sponsored by the College of Education, Brock University, St. Catharines, Ontario.

The information we gather from this questionnaire-interview will help government and other agencies to plan and provide better services for the increasing number of seniors in the future.

In the next 45 minutes or so I will be talking about your learning needs and interests related to health. The information we gather today is strictly confidential. Your name will not appear on this questionnaire or in any reports.

Do you have any questions before I begin?

Let me read a short paragraph to you which tells a little bit about how this interview is supposed to work. I have a set of questions that I have to ask exactly the way they are written. That way we know everyone in the study is answering the same questions and we can compare their answers.

For many questions I will read a list of answers. Whenever possible you should choose one of the answers I read with the question. There are no right or wrong answers, we only want your opinions.

It is important that your answers be as accurate as you can make them. So take time if you need it, to think about your answers; and please stop me if you have any questions about the kind of information we want.

1. **The following are general health topics. You may or may not be interested in learning more about about them. After I read each topic I will ask you if you are not interested in learning about it, slightly interested, moderately interested, or very interested.**

Topic	N.I	S.I.	M.I.	V.I.
(a) The normal aging process				
(b) Community Resources - Help available to seniors (General information, written material, professionals and agencies)				

Topic	N.I	S.I.	M.I.	V.I.
(c) Hazards to health in air, water and food				
(d) General nutritional requirements (Daily food needed for health)				
(e) Fibre in the diet (roughage)				
(f) Use and misuse of vitamins				
(g) Diet and heart disease				
(h) Salt in the diet				
(i) Calcium requirements				
(j) Cholesterol and fats in the diet				
(k) Shopping for food on a budget				
(l) Exercise for seniors				
(m) Foot care				
(n) Dental care				
(o) Care of the eyes				
(p) Stress management (Stress-pressures causing strain or tension)				
(q) How to relax (Lessening of tension)				
(r) Sexuality and aging (Sexual attitudes and behaviour)				
(s) Building healthy relationships (Building relationships that are equal and satisfying for both people)				
(t) Maintaining control in your life (Governing your life)				

Topic	N.I	S.I.	M.I.	V.I.
(u) Adapting to change				
(v) Assertiveness training. Sticking up for yourself appropriately.				
(w) Avoiding constipation (Hard or infrequent bowel movements)				
(x) Bereavement (Sadness after the death of a loved one)				
(y) Immunization for seniors (The needles seniors need)				
(z) Safety in the home				
(aa) Safety in the community				
(bb) Crime against the elderly				
(cc) Understanding medications and their proper use				
(dd) Problems with the menopause (Change of life for women) (Include for women only)				
(ee) Breast self examination (Include for women only)				

(ff) Other health topics not mentioned

Please specify:

1. _____
2. _____
3. _____
4. _____

2. **In the next section some health problems and illnesses are listed. Once again you may or may not be interested in learning more about them. After I read each topic I will ask you if you are not interested in learning about it, slightly interested, moderately interested or very interested.**

Topic	N.I	S.I.	M.I.	V.I.
(a) High blood pressure				

Topic	N.I	S.I.	M.I.	V.I.
(b) Heart attack or other heart problems including angina or chest pain				
(c) Stroke				
(d) Circulation problems in the arms and legs				
(e) Ulcers - of the digestive system				
(f) Intestinal disorders including liver and gallbladder problems				
(g) Kidney disease				
(h) Other urinary diseases (including prostate trouble) - add if senior is a male				
(i) Problem controlling your bladder				
(j) Venereal diseases - sexually transmitted diseases including A.I.D.S. - acquired immune deficiency syndrome				
(k) Back problems				
(l) Osteoporosis - brittle bones				
(m) Arthritis (Inflammation of a joint)				
(n) Rheumatism (Pain in the joints or muscles)				
(o) Asthma (Disease of the bronchi causing wheezing and difficulty breathing)				
(p) Emphysema (Chronic lung disease)				
(q) Chronic bronchitis (Inflammation of the bronchi)				
(r) T.B. (Tuberculosis)				

Topic	N.I	S.I.	M.I.	V.I.
(s) Anemia (Blood deficiency - quality or quantity)				
(t) Diabetes - (Problem with carbohydrate metabolism				
(u) Problems with weight control				
(v) Problems quitting smoking				
(w) Coping with poor hearing				
(x) Coping with poor vision				
(y) Glaucoma or Cataracts (Glaucoma - serious disease of the eye - retina and optic nerve damage. Cataract - clouding of the lens of the eye)				
(z) Epilepsy (Nervous disorder with convulsions or seizures)				
(aa) Mental Illness (Disease of the mind)				
(bb) Mental confusion - Getting mixed up with important daily activities including Alzheimer's disease (Confusion - disturbed orientation in regard to time, place or person)				
(cc) memory problems				
(dd) Depression (Extensive sadness)				
(ee) Suicide				
(ff) Bad nerves, e.g. anxiety (feeling of uneasiness, apprehension or dread)				
(gg) Dizziness (Sensation of rotation of one's self or surroundings)				
(hh) Frequent headaches				

Topic	N.I	S.I.	M.I.	V.I.
(ii) Alcohol abuse - Ingestion of alcohol in quantities that interfere with your health and well-being				
(jj) Drug abuse - Ingestion of drugs in quantities that interfere with your health and well-being				
(kk) Rape - (Forcing a woman to have sexual intercourse) (Include for women only)				
(ll) Physical disability or handicap				
(mm) Cancer or leukemia - (Malignant diseases)				
(nn) Insomnia - (Trouble sleeping)				
(oo) Pain control				
(pp) Body temperature problems - too cold or too hot				
(qq) Elder abuse - Physical, psychological, and financial abuse including neglect				
(rr) Other health problems and illnesses not mentioned Please specify: 1. _____ 2. _____ 3. _____ 4. _____				

3. **We have mentioned many topics. Take a few minutes to think if there are any more topics related to health you are interested in and would like to learn more about? Add as many as you like.**

1. _____
2. _____
3. _____

4. **How would you like to learn about the areas you have mentioned?**

_____

_____

_____

_____

5. **In the last 12 months did you actively seek health information from anyone, any group, reading materials, lectures, or other sources?**

Yes _____ No _____

If Yes	(A) Which Topics, and	(B) Sources of Information
1.		
2.		
3.		
4.		

6. **In the last 12 months did you come across or receive health information?**

Yes _____ No _____

If Yes	(A) Which Topics, and	(B) Sources of Information
1.		
2.		
3.		
4.		

7. **Health information is available in the community in many forms. Which forms, if any, do you prefer from the following list? Choose as many as you like.**

(a) Information from talking with friends and relatives

(b) .Information from newspapers

(c) Information from magazines

(d) Information from library material including books

(e) Information from books generally

(f) Information from television

(g) Information from dentists

(h) Information from the radio

(i) Information from pamphlets in the community

(j) Information from your family doctor

(k) Information from a medical specialist

(l) Information from a hospital nurse - if you were in the hospital

(m) Information from a V.O.N. - Victorian Order of Nurse - if you had one

(n) Information from a St. Elizabeth Nurse - if you had one

(o) Information from a public health nurse - if you had one

(p) Information from a nutritionist - if you had one

(q) Information from a druggist

(r) Information from video-tapes

(s) Information from a therapist - if you had one

(t)(i) Information from Tel-Med - Free information over the telephone

(t)(ii) Are you aware of this resource?

(u) Information from a senior citizen's centre

(v) Information from pamphlets in the doctor's office

(w) Information given in courses given at schools, colleges, or universities. Please specify:

(x) Information from lectures in the community. Please specify:

(y) Information from other sources - Please specify:

8. **Would you attend lectures or courses in the community (A) in the evening?**

Yes _____ No _____

or (B) given during the day?

Yes _____ No _____

The following questions are relate to you general health and lifestyle.

9. **Compared to other people your own age, how would you rate your overall health at the present time? Would this be:**

_____ excellent
_____ good
_____ fair
_____ poor

10. I'm going to read the same list of health problems and illnesses as I did before. Please tell me if you have any of these problems or illnesses now. If you answer yes I will ask you if it presents any difficulty for you in carrying out your daily activities. Does it give you no difficulty, a little difficulty, a moderate amount of difficulty, or a great deal of difficulty?

Topic	Yes	No	N.D	L.D.	M.D.	G.D.
(a) High blood pressure						
(b) Heart attack or other heart problems including angina or chest pain						
(c) Stroke						
(d) Circulation problems in the arms and legs						
(e) Ulcers - of the digestive system						
(f) Intestinal disorders including liver and gallbladder problems						
(g) Kidney disease						
(h) Other urinary diseases (including prostate trouble) - add if senior is a male						
(i) Problem controlling your bladder						
(j) Venereal diseases - sexually transmitted diseases including A.I.D.S. - acquired immune deficiency syndrome						
(k) Back problems						
(l) Osteoporosis - brittle bones						
(m) Arthritis (Inflammation of a joint)						
(n) Rheumatism (Pain in the joints or muscles)						

Topic	Yes	No	N.D	L.D.	M.D.	G.D.
(o) Asthma (Disease of the bronchi causing wheezing and difficulty breathing)						
(p) Emphysema (Chronic lung disease)						
(q) Chronic bronchitis (Inflammation of the bronchi)						
(r) T.B. (Tuberculosis)						
(s) Anemia (Blood deficiency - quality or quantity)						
(t) Diabetes -(Problem with carbohydrate metabolism)						
(u) Problems with weight control						
(v) Problems quitting smoking						
(w) Coping with poor hearing						
(x) Coping with poor vision						
(y) Glaucoma or Cataracts (Glaucoma - serious disease of the eye - retina and optic nerve damage. Cataract - clouding of the lens of the eye)						
(z) Epilepsy (Nervous disorder with convulsions or seizures)						
(aa) Mental Illness (Disease of the mind)						
(bb) Mental confusion - Getting mixed up with important daily activities including Alzheimer's disease (Confusion - disturbed orientation in regard to time, place or person)						

Topic	Yes	No	N.D	L.D.	M.D.	G.D.
(cc) memory problems						
(dd) Depression (Extensive sadness)						
(ee) Suicide						
(ff) Bad nerves, e.g. anxiety (feeling of uneasiness, apprehension or dread)						
(gg) Dizziness (Sensation of rotation of one's self or surroundings)						
(hh) Frequent headaches						
(ii) Alcohol abuse - Ingestion of alcohol in quantities that interfere with your health and well-being						
(jj) Drug abuse - Ingestion of drugs in quantities that interfere with your health and well-being						
(kk) Rape - (Forcing a woman to have sexual intercourse) (Include for women only)						
(ll) Physical disability or handicap						
(mm) Cancer or leukemia - (Malignant diseases)						
(nn) Insomnia - (Trouble sleeping)						
(oo) Pain control						
(pp) Body temperature problems - too cold or too hot						
(qq) Elder abuse - Physical, psychological, and financial abuse including neglect						

Topic	Yes	No	N.D	L.D.	M.D.	G.D.
(rr) Interviewer will add topics given in 2(rr) 1. _____ 2. _____ 3. _____ 4. _____						
Ask respondents if these topics from question #1 are a problem to them now.						
10 (l-p) Stress management						
10 (l-r) Sexuality and aging						
10 (l-s) Building healthy relationships						
10 (l-t) Maintaining control in your life						
10 (l-u) Adpating to change						
10 (l-v) Asserting yourself appropriately						
10 (l-w) Avoiding constipation						
10 (l-x) Bereavement within the last 12 months						
10 (lbb) Crime against the elderly						
10 (lcc) Understanding medications and their proper use						
10 (ldd) Problems with the menopause (Include for women only)						

11. **Which of your health problems or illnesses are chronic, if any? i.e. - You have been under the care of your doctor for the condition for a minimum of 3 years or had the condition for at least 3 years.**

1. _____
2. _____
3. _____

12. Do you wear glasses or contact lenses?

Yes _____ No _____

13. Would you say your eyesight (with glasses, if you need them) is:

Excellent _____
Good _____
Fair _____
Poor _____

14. (With your glasses) Are you able to read

(A) newsprint Yes _____ No _____?

(B) magazine print Yes _____ No _____?

15. Observe if the senior can hear normal talking tones.

Yes _____ No _____

16. Do you wear (a) hearing aid(s)?

Yes _____ No _____

17. Are you able to walk around an average block?

Yes _____ No _____

18. Are you able to walk up or down 10 stairs at a time?

Yes _____ No _____

19. What transportation do you use? Please indicate all the answers that apply.

_____ Bus
_____ Drive your own car
_____ Driven in a car by others
_____ Taxi
_____ Walk
_____ D.A.R.T.S. - Disabled and Aged Regional Transportation System
_____ Other. Please specify.

_____

20. How many alcoholic drinks do you have per week from this list? Please check the number on the list. (Interviewer hands the senior a card with the catagories on it.)(One beer - 12 oz., Glass of wine - 4 oz., Liquor - 1-1/2 oz. per drink)

_____ 0
_____ 1-4
_____ 5-10
_____ 10-15
_____ 15-20
_____ over 20

21. **Do you smoke?**

Yes _____ No _____

If Yes - In what form do you use tobacco? _____

Daily number _____

22. **Is your weight 10 pounds over or under what you would like it to be?**

Yes _____ No _____

If Yes - Please indicate whether you are over or under your desired weight and the number of pounds.

Over _____ pounds Under _____ pounds

23. **Do you take any non-prescription drugs? (Drugs that are not ordered by the doctor)**

Yes _____ No _____

If Yes - Please specify:

_____
_____
_____

24. **Are you now receiving services from any community agencies? (ex. a visiting homemaker, or a visiting community nurse)**

Yes _____ No _____

If Yes - Which ones?

_____
_____
_____

25. **Observe sex.** **Male** _____ **Female** _____

26. **Are you married** ____, **single** ____, **separated** ____, **divorced** ____, **or widowed** ____ ?

27. **What type of housing do you live in?**

____ (a) house
____ (b) apartment - general
____ (c) apartment - seniors only
____ (d) room in a house or hotel
____ (e) other - Please specify:

_____

28. **Does anyone live with you?**

____ (a) No
____ (b) spouse/partner
____ (c) your own children
____ (d) other relatives
____ (e) friends
____ (f) other - Please specify:

_____

29. **What is your date of birth?**

_____

30. **Were you born in Canada?**

Yes _____ No _____

If No - (a) Where were you born?
(b) In what year did you first come to Canada?

(a) _____
(b) _____

31. **What is your first language?**

_____

32. **Does the senior speak English well? Observe only.**

Yes _____ No _____

33. **In In our society some people read and some people do not. Do you understand written English well?**

Yes _____ No _____

If No - Please indicate the reason(s) from this list:

____ (a) Your vision is poor
____ (b) You read another language
____ (c) You never learned to read
___ (d) other - Please specify:

_____

34. **What is the highest level of education you have completed? As I read the list, stop me when I come to the level you completed.**

____ (a) no formal schooling (self-taught)
____ (b) some elementary schooling
____ (c) completed elementary schooling
____ (d) some secondary school education
____ (e) secondary school graduation certificate

____ (f) some post secondary school education
____ (g) college or university education completed - B.A. (Bachelor or Arts) or higher degree
____ (h) other - Please specify:

_____
_____

35. Are you currently working at a paid job?

Yes _____ No _____

36. Are you doing any volunteer work now?

Yes _____ No _____

If Yes - Please specify:

_____

37. What kind of work have you done most of your life?

_____
_____

38. Here is a card with a number of income groups on it. Please check the group that shows your actual total household monthly income.

____ (a) Less than $600
____ (b) $600 - $999
____ (c) $1000 - $1499
____ (d) $1500 - $1999
____ (e) $2000 - $2499
____ (f) over $3000

39. Is there anything you would like to add?

_____
_____
_____

40. Do you have any comments about the questionnaire-interview?

_____
_____
_____
_____

Thank you for taking the time to help me gather this information.

41. Interviewer writes anecdotal notes re: interview.

Appendix B

Letter to Experts

94 Longwood Rd. S.,
Hamilton, Ontario
L8S 1S6

March 10, 1989

Dear :

Thank you for agreeing to assist me with my thesis by using your expertise to critique my questionnaire-interview. The following information will help you understand my research.

The research question is "How do the non-institutionalized elderly in the Hamilton-Wentworth region perceive their learning needs and interests related to health?" In this study, the elderly are sixty-five years and over. A perceived learning need or interest exists when the learner feels he or she lacks some information or skill that he or she wants. The definition of health used is an optimal level of functioning related to the aging process including physical, mental, and social well-being.

I will briefly describe the methodology which I am using. The research design is descriptive. The population that will be studied is the group of people sixty-five years and older who are not institutionalized in the Hamilton-Wentworth region. I will randomly select one hundred and twenty names from the above population using the Old Age Security Data Base (Health and Welfare).

The instrument used will be a questionnaire-interview used in the senior's home. It will measure their perceived learning needs and interests, their perceived health status, mobility, as well as some demographic information related to how seniors get or wish to get health information.

I was unable to secure a reliable, valid instrument from the literature reviewed. Because of this, I have created this questionnaire-interview. It has been used once with a senior and critiqued by my faculty advisor.

Now I am asking you, content and questionnaire experts, to critique it. After you have done this, I will make adjustments to the instrument. Then I will pretest it on ten non-institutionalized seniors from the region. It will then be ready for use.

The data collected will be qualitative and non-parametric quantitative data. Coding and cleaning of data will follow. Data will be analyzed using a descriptive statistical model. When this is completed, the research will be written including the research question, the rationale, a comprehensive

literature review, the methodology used, the results, a discussion of the results, the implications of the research and a general conclusion. References will be included.

Please add your suggestions and comments in red pen under, beside, and above the questions or on the blank paper provided at the end of the questionaire-interview.

Please check the questionnaire-interview for accuracy, relevance to the topic, comprehension, clarity, logic and length. For your convenience, I am including a checklist from "Writing Good Questions" from "Guide to Questionnaire Construction and Question Writing" by Larry Chambers and Christel Woodward.

1. Are the words simple, direct, and familiar to all?
2. Is the question as clear and specific as possible?
3. Is it a double question?
4. Does the question have a double negative?
5. Is the question too demanding?
6. Are the questions leading or biased?
7. Is the question applicable to all respondents?
8. Can the item be shortened with no loss of meaning?
9. Is the question objectionable?
10. Will the answers be influenced by response styles?
    ie. (a) acquiescences - the tendency to agree
        (b) social desirability
        (c) ordinal or position bias
11. Have you assumed too much knowledge?
12. Have you assumed too much about the respondents behaviour and/or the situation?
13. Is an appropriate time referent provided?
14. Can the responses be compared with existing data?
15. Does the question have several possible meanings?
16. Have you exhausted the response alternatives?
17. Are the response alternatives mutually exclusive (and exhaustive)?

Please phone me if you have any questions at 528-5631.

I thank you in advance for your time and effort.

Sincerely yours,

Mary Joan Bradley

Mary Joan Bradley

Appendix C

Participant Paper for Question 1 and 2

I'M (1) NOT INTERESTED IN LEARNING ABOUT IT

(2) SLIGHTLY INTERESTED IN LEARNING ABOUT IT

(3) MODERATELY INTERESTED IN LEARNING ABOUT IT

(4) VERY INTERESTED IN LEARNING ABOUT IT

Appendix D

Participant Paper for Question 10

DOES THIS PROBLEM PRESENT

(1) NO DIFFICULTY TO YOU IN CARRYING OUT YOUR DAILY ACTIVITIES

(2) A LITTLE DIFFICULTY TO YOU IN CARRYING OUT YOUR DAILY ACTIVITIES

(3) A MODERATE AMOUNT OF DIFFICULTY IN CARRYING OUT YOUR DAILY ACTIVITIES

(4) A GREAT DEAL OF DIFFICULTY IN CARRYING OUT YOUR DAILY ACTIVITIES

Appendix E

Participant Paper for Question 20

NUMBER OF ALCOHOLIC DRINKS WEEKLY:

(A) 0 _____

(B) 1-4 _____

(C) 5-10 _____

(D) 10-15 _____

(E) 15-20 _____

(F) OVER 20 _____

Appendix F

Participant Paper for Question 38

ACTUAL TOTAL HOUSEHOLD MONTHLY INCOME:

(A) LESS THAN $600 _____

(B) $600 - $999 _____

(C) $1000 - $1499 _____

(D) $1500 - $1999 _____

(E) $2000 - 2499 _____

(F) OVER $3000 _____

Appendix G

Participant Letter from the Regional Chairman

THE REGIONAL MUNICIPALITY
OF HAMILTON - WENTWORTH

Office of the Chairman

October, 1989

Dear Hamilton-Wentworth Senior:

It gives me pleasure to invite you to participate in a research study regarding the learning needs and interests related to health of seniors living in the Hamilton-Wentworth region. This study is sponsored by Brock University.

With assistance from seniors, this study will identify seniors' learning needs and interests related to health so that those planning health promotion activities and material will have valuable information from the seniors themselves.

We hope to visit and interview over fifty seniors in the region. The interview will take approximately an hour of your time. The researcher will ask you about the degree of your interest in learning about health topics such as nutrition, the proper use of medications, and high blood pressure. There are no right or wrong answers to the questionnaire. It's your opinions we want. Your responses will be used in the research report but your name and identity will remain completely confidential.

You will find a card enclosed in this letter. Please fill it in and return it to Mary Joan Bradley in the stamped envelope provided. Mary Joan Bradley, the main researcher, will contact those who want to participate to arrange a convenient time to visit.

I encourage you to participate in this worthwhile research by agreeing to the interview with our researcher. If you have any questions please do not hesitate to call Mary Joan Bradley - 528-5631.

Sincerely yours,

RJW/lc
Att.

R.J. (Reg) Whynott
Chairman

P.O. Box 910, Hamilton, Ontario L8N 3V9
119 King Street West, 15th Floor
Tel: (416) 526-4200 Fax: (416) 577-0645

Appendix H

Participant Return Card

Please check one box below and return in the envelope provided.

☐ - I wish to participate in this research.
(We need your name, address and telephone number to contact you.)

Name: _____

Address: _____

_____

Telephone No.: _____

I am unable to participate in this research because:

☐ - I am not well.
☐ - I am not interested in it.
☐ - Another reason - Please state.

_____

Appendix I

Participant Consent Form

Consent

I give my consent to this questionnaire-interview related to my learning needs and interests related to health.

Date: _____ _____

(Signature of Participant)

_____

(Signature of Witness)

Appendix J

Paper Left with Participants

PLEASE CONTACT ME (MARY JOAN BRADLEY) AFTER JULY 31, 1990

IF YOU WANT A RESEARCH SUMMARY - TELEPHONE: 528-5631

Appendix K

Anecdotal Notes by Researcher

Participant	
1	Friendly co-operative male senior.
2	Friendly co-operative female senior coping with many health problems.
3	Friendly co-operative quiet female senior with a limp and many health problems.
4	Friendly co-operative male senior.
5	Very friendly co-operative female senior -- asked me to stay for tea because she was lonely.
6	Friendly co-operative male senior walking with a limp and very interested in spiritual matters.
7	Friendly co-operative female senior.
8	Friendly co-operative male senior -- wife present but listened only.
9	Friendly co-operative male senior with some shortness of breath.
10	Friendly co-operative male senior. Wife acted as an interpreter. French was his first language. Slight shortness of breath when sitting. Smoking, in spite of emphysema. English fairly good. Not always sure of the question.
11	Friendly co-operative female senior. Slightly concerned that she had fewer learning needs because she was a nurse and knew a lot about health already.
12	Friendly co-operative male senior.
13	Friendly co-operative male senior.
14	Friendly co-operative male senior -- very active, plays hockey, wants to play tennis.
15	Friendly co-operative female senior.
16	Friendly co-operative female senior. History of an extremely severe cardiac condition.
17	Friendly co-operative male senior. Walks slowly--limp visible.
18	Friendly co-operative male senior.
19	Friendly co-operative male senior.
20	Friendly co-operative female senior.
21	Friendly co-operative male senior wanting to give a lot of detail about his experiences.
22	Friendly co-operative female senior with serious health problems.
23	Friendly co-operative female senior.

Appendix L

Profiles of Individual Participant

Learning Needs and Interests

Learning Needs and Interests - Participant Profile 1

			S.I.	M.I.	V.I.
1	(a)	Normal Aging Process	X		
1	(b)	Community Resources	X		
1	(c)	Hazards in Air, Water, and Food		X	
1	(d)	Nutritional Requirements		X	
1	(f)	Use and Misuse of Vitamins	X		
1	(h)	Salt in the Diet		X	
1	(j)	Cholesterol and Fats in the Diet		X	
1	(o)	Care of Eyes			X
1	(p)	Stress Management			X
1	(q)	How to Relax			X
1	(s)	Building Healthy Relationships	X		
1	(t)	Maintaining Control			X
1	(y)	Immunization for Seniors		X	
1	(aa)	Safety in the Community		X	
1	(cc)	Proper Use of Medications	X		
*1	(ff)	Transportation for Seniors		X	
*1	(ff)	Allergies			X
2	(a)	High Blood Pressure		X	
2	(w)	Coping with Poor Hearing			X
2	(x)	Coping with Poor Vision		X	
2	(y)	Glaucoma or Cataracts		X	
2	(cc)	Memory Problems		X	

Total Learning Needs and Interests - 22.

Key: S.I. - Slightly Interested
M.I. - Moderately Interested
V.I. - Very Interested

* - Topics added by participant

Learning Needs and Interests - Participant Profile 2

			S.I.	M.I.	V.I.
1	(a)	Normal Aging Process			X
1	(b)	Community Resources		X	
1	(c)	Hazards in Air, Water, and Food			X
1	(d)	Nutritional Requirements			X
1	(e)	Fibre in the Diet			X
1	(f)	Use and Misuse of Vitamins			X
1	(h)	Diet and Heart Disease			X
1	(i)	Calcium Requirements			X
1	(j)	Cholesterol and Fats in the Diet			X
1	(k)	Shopping for Food on a Budget	X		
1	(l)	Exercise for Seniors			X
1	(m)	Foot Care			X
1	(o)	Care of the Eyes			X
1	(p)	Stress Management			X
1	(q)	How to Relax			X
1	(s)	Building Healthy Relationships			X
1	(t)	Maintaining Control			X
1	(x)	Bereavement		X	
1	(y)	Immunization for Seniors			X
1	(z)	Safety in the Home		X	
1	(aa)	Safety in the Community			X
1	(bb)	Crime Against the Elderly			X
1	(cc)	Proper Use of Medications			X
1	(ee)	Breast Self Examination			X
2	(a)	High Blood Pressure			X
2	(b)	Heart Problems			X
2	(c)	Stroke			X
2	(d)	Circulation Problems			X
2	(e)	Ulcers	X		
2	(f)	Intestinal Disorders			X
2	(g)	Kidney Disease			X
2	(h)	Other Urinary Diseases		X	
2	(i)	Problem Controlling your Bladder			X
2	(k)	Back Problems			X
2	(l)	Osteoporosis			X
2	(m)	Arthritis			X
2	(o)	Asthma			X
2	(q)	Chronic Bronchitis			X
2	(s)	Anemia			X
2	(t)	Diabetes			X
2	(u)	Problems with Weight Control			X
2	(v)	Problems Quitting Smoking			X
2	(x)	Coping with Poor Vision			X
2	(y)	Glaucoma or Cataracts			X

Participant Profile 2 (continued)

	S.I.	M.I.	V.I.
2 (aa) Mental Illness			X
2 (bb) Mental Confusion			X
2 (ff) Bad Nerves			X
2 (gg) Dizziness			X
2 (hh) Frequent Headaches			X
2 (jj) Drug Abuse			X
2 (ll) Physical Disability			X
2 (mm) Cancer or Leukemia			X
2 (nn) Insomnia			X
2 (qq) Elder Abuse			X

Total Learning Needs and Interests - 55

Key: S.I. - Slightly Interested
M.I. - Moderately Interested
V.I. - Very Interested

Learning Needs and Interests - Participant Profile 3

			S.I.	M.I.	V.I.
1	(a)	Normal Aging Process		X	
1	(b)	Community Resources	X		
1	(c)	Hazards in Air, Water, and Food			X
1	(d)	Nutritional Requirements		X	
1	(e)	Fibre in the Diet			X
1	(f)	Use and Misuse of Vitamins		X	
1	(g)	Diet and Heart Disease			X
1	(h)	Salt in the Diet			X
1	(i)	Calcium Requirements			X
1	(j)	Cholesterol and Fats in the Diet			X
1	(k)	Shopping for Food on a Budget		X	
1	(l)	Exercise for Seniors	X		
1	(m)	Foot Care		X	
1	(o)	Care of the Eyes			X
1	(p)	Stress Management			X
1	(q)	How to Relax			X
1	(r)	Sexuality and Aging		X	
1	(s)	Building Healthy Relationships		X	
1	(t)	Maintaining Control			X
1	(u)	Adapting to Change		X	
1	(v)	Assertiveness Training			X
1	(w)	Avoiding Constipation		X	
1	(x)	Bereavement		X	
1	(y)	Immunization for Seniors		X	
1	(z)	Safety in the Home			X
1	(aa)	Safety in the Community			X
1	(bb)	Crime Against the Elderly			X
1	(cc)	Proper Use of Medications			X
1	(ee)	Breast Self Examination		X	
2	(a)	High Blood Pressure			X
2	(b)	Heart Problems			X
2	(c)	Stroke			X
2	(d)	Circulation Problems			X
2	(e)	Ulcers		X	
2	(f)	Intestinal Disorders		X	
2	(g)	Kidney Disease			X
2	(h)	Other Urinary Diseases	X		
2	(i)	Problem Controlling your Bladder	X		
2	(j)	Venereal Diseases			X
2	(k)	Back Problems		X	
2	(l)	Osteoporosis			X
2	(m)	Arthritis			X
2	(n)	Rheumatism	X		
2	(o)	Asthma		X	

Participant Profile 3 (continued)

		S.I.	M.I.	V.I.
2 (p)	Emphysema		X	
2 (q)	Chronic Bronchitis		X	
2 (r)	Tuberculosis			X
2 (s)	Anemia		X	
2 (t)	Diabetes			X
2 (u)	Problems with Weight Control			X
2 (w)	Coping with Poor Hearing	X		
2 (x)	Coping with Poor Vision		X	
2 (y)	Glaucoma or Cataracts	X		
2 (z)	Epilepsy			X
2 (aa)	Mental Illness			X
2 (bb)	Mental Confusion			X
2 (cc)	Memory Problems		X	
2 (dd)	Depression			X
2 (ee)	Suicide			X
2 (ff)	Bad Nerves		X	
2 (gg)	Dizziness		X	
2 (hh)	Frequent Headaches		X	
2 (ii)	Alcohol Abuse			X
2 (jj)	Drug Abuse			X
2 (kk)	Rape		X	
2 (ll)	Physical Disability			X
2 (mm)	Cancer or Leukemia			X
2 (nn)	Insomnia		X	
2 (oo)	Pain Control			X
2 (pp)	Body Temperature Problems		X	
2 (qq)	Elder Abuse			X

Total Learning Needs and Interests - 71

Key: S.I. - Slightly Interested
M.I. - Moderately Interested
V.I. - Very Interested

Learning Needs and Interests - Participant Profile 4

			S.I.	M.I.	V.I.
1	(a)	Normal Aging Process		X	
1	(b)	Community Resources		X	
1	(c)	Hazards in Air, Water, and Food			X
1	(d)	Nutritional Requirements			X
1	(e)	Fibre in the Diet			X
1	(f)	Use and Misuse of Vitamins			X
1	(g)	Diet and Heart Disease			X
1	(h)	Salt in the Diet		X	
1	(i)	Calcium Requirements			X
1	(j)	Cholesterol and Fats in the Diet			X
1	(k)	Shopping for Food on a Budget		X	
1	(l)	Exercise for Seniors			X
1	(m)	Foot Care		X	
1	(n)	Dental Care			X
1	(o)	Care of the Eyes			X
1	(p)	Stress Management			X
1	(q)	How to Relax			X
1	(r)	Sexuality and Aging		X	
1	(s)	Building Healthy Relationships			X
1	(t)	Maintaining Control		X	
1	(u)	Adapting to Change	X		
1	(v)	Assertiveness Training	X		
1	(w)	Avoiding Constipation	X		
1	(x)	Bereavement		X	
1	(y)	Immunization for Seniors			X
1	(z)	Safety in the Home			X
1	(aa)	Safety in the Community		X	
1	(bb)	Crime Against the Elderly			X
1	(cc)	Proper Use of Medication			X
2	(a)	High Blood Pressure			X
2	(b)	Heart Problems			X
2	(c)	Stroke			X
2	(d)	Circulation Problems		X	
2	(e)	Ulcers		X	
2	(f)	Intestinal Disorders		X	
2	(g)	Kidney Disease		X	
2	(h)	Other Urinary Diseases		X	
2	(i)	Problems Controlling your Bladder			X
2	(j)	Venereal Diseases		X	
2	(k)	Back Problems		X	
2	(l)	Osteoporosis		X	
2	(m)	Arthritis			X
2	(n)	Rheumatism			X
2	(o)	Asthma		X	

Participant Profile 4 (continued)

		S.I.	M.I.	V.I.
2 (p)	Emphysema		X	
2 (q)	Chronic Bronchitis		X	
2 (r)	Tuberculosis			X
2 (s)	Anemia			X
2 (t)	Diabetes		X	
2 (u)	Problems with Weight Control	X		
2 (v)	Problems Quitting Smoking	X		
2 (w)	Coping with Poor Hearing			X
2 (x)	Coping with Poor Vision			X
2 (y)	Glaucoma or Cataracts			X
2 (z)	Epilepsy		X	
2 (aa)	Mental Illness		X	
2 (bb)	Mental Confusion			X
2 (cc)	Memory Problems		X	
2 (dd)	Depression			X
2 (ee)	Suicide	X		
2 (ff)	Bad Nerves		X	
2 (gg)	Dizziness		X	
2 (hh)	Frequent Headaches		X	
2 (ii)	Alcohol Abuse		X	
2 (jj)	Drug Abuse		X	
2 (ll)	Physical Disability		X	
2 (mm)	Cancer of Leukemia		X	
2 (nn)	Insomnia		X	
2 (oo)	Pain Control			X
2 (pp)	Body Temperature Problems		X	
2 (qq)	Elder Abuse			X

Total Learning Needs and Interests - 71

Key: S.I. - Slightly Interested
M.I. - Moderately Interested
V.I. - Very Interested

Learning Needs and Interests - Participant Profile 5

			S.I.	M.I.	V.I.
1	(a)	Normal Aging Process			X
1	(c)	Hazards in Air, Water, and Food	X		
1	(d)	Nutritional Requirements			X
1	(e)	Fibre in the Diet			X
1	(f)	Use and Misuse of Vitamins			X
1	(g)	Diet and Heart Disease			X
1	(h)	Salt in the Diet			X
1	(i)	Calcium Requirements			X
1	(j)	Cholesterol and Fats in the Diet			X
1	(k)	Shopping for Food on a Budget			X
1	(l)	Exercise for Seniors			X
1	(m)	Foot Care		X	
1	(o)	Care of the Eyes			X
1	(p)	Stress Management			X
1	(s)	Building Health Relationships			X
1	(t)	Maintaining Control			X
1	(v)	Assertiveness Training			X
1	(w)	Avoiding Constipation		X	
1	(x)	Bereavement			X
1	(y)	Immunization for Seniors			X
1	(z)	Safety in the Home			X
1	(aa)	Safety in the Community			X
1	(bb)	Crime Against the Elderly			X
1	(cc)	Proper Use of Medications			X
1	(ee)	Breast Self Examination	X		
2	(a)	High Blood Pressure		X	
2	(b)	Heart Problems			X
2	(c)	Stroke			X
2	(d)	Circulation Problems			X
2	(e)	Ulcers			X
2	(g)	Kidney Disease		X	
2	(i)	Problem Controlling your Bladder			X
2	(l)	Osteoporosis			X
2	(m)	Arthritis			X
2	(n)	Rheumatism		X	
2	(q)	Chronic Bronchitis	X		
2	(s)	Anemia			X
2	(u)	Problems with Weight Control			X
2	(w)	Coping with Poor Hearing			X
2	(x)	Coping with Poor Vision			X
2	(y)	Glaucoma or Cataracts			X
2	(aa)	Mental Illness	X		
2	(bb)	Mental Confusion		X	
2	(cc)	Memory Problems			X

Participant Profile 5 (continued)

	S.I.	M.I.	V.I.
2 (dd) Depression			X
2 (ee) Suicide	X		
2 (ff) Bad Nerves		X	
2 (gg) Dizziness	X		
2 (jj) Drug Abuse			X
2 (kk) Rape			X
2 (ll) Physical Disability			X
2 (mm) Cancer or Leukemia			X
2 (nn) Insomnia		X	
2 (oo) Pain Control		X	
2 (pp) Body Temperature Problems			X
2 (qq) Elder Abuse			X

Total Learning Needs and Interests - 56

Key: S.I. - Slightly Interested
M.I. - Moderately Interested
V.I. - Very Interested

Learning Needs and Interests - Participant Profile 6

			S.I.	M.I.	V.I.
1	(b)	Community Resources	X		
1	(c)	Hazards in Air, Water, and Food		X	
1	(d)	Nutritional Requirements			X
1	(e)	Fibre in the Diet			X
1	(f)	Use and Misuse of Vitamins			X
1	(g)	Diet and Heart Disease		X	
1	(h)	Salt in the Diet	X		
1	(i)	Calcium Requirements			X
1	(j)	Cholesterol and Fats in the Diet		X	
1	(k)	Shopping for Food on a Budget	X		
1	(l)	Exercise for Seniors		X	
1	(m)	Foot Care		X	
1	(n)	Dental Care	X		
1	(o)	Care of the Eyes		X	
1	(p)	Stress Management			X
1	(q)	How to Relax			X
1	(s)	Building Healthy Relationships			X
1	(t)	Maintaining Control		X	
1	(u)	Adapting to Change		X	
1	(v)	Assertiveness Training			X
1	(w)	Avoiding Constipation			X
1	(x)	Bereavement		X	
1	(y)	Immunization for Seniors		X	
1	(z)	Safety in the Home	X		
1	(aa)	Safety in the Community			X
1	(bb)	Crime Against the Elderly		X	
1	(cc)	Proper Use of Medications			X
2	(a)	High Blood Pressure			X
2	(b)	Heart Problems		X	
2	(c)	Stroke			X
2	(d)	Circulation Problems			X
2	(e)	Ulcers			X
2	(f)	Intestinal Disorders	X		
2	(g)	Kidney Disease			X
2	(h)	Other Urinary Diseases	X		
2	(k)	Back Problems	X		
2	(l)	Osteoporosis			X
2	(m)	Arthritis			X
2	(o)	Asthma	X		
2	(p)	Emphysema	X		
2	(q)	Chronic Bronchitis	X		
2	(s)	Anemia	X		
2	(t)	Diabetes	X		
2	(w)	Coping with Poor Hearing	X		

Participant Profile 6 (continued)

		S.I.	M.I.	V.I.
2 (y)	Glaucoma or Cataracts		X	
2 (aa)	Mental Illness	X		
2 (bb)	Mental Confusion			X
2 (cc)	Memory Problems			X
2 (dd)	Depression		X	
2 (ff)	Bad Nerves		X	
2 (ll)	Physical Disability			X
2 (mm)	Cancer or Leukemia	X		
2 (oo)	Pain Control	X		
2 (pp)	Body Temperature Problems		X	
2 (qq)	Elder Abuse		X	

Total Learning Needs and Interests - 55

Key: S.I. - Slightly Interested
M.I. - Moderately Interested
V.I. - Very Interested

One topic was excluded because it was not health related.

Learning Needs and Interests - Participant Profile 7

			S.I.	M.I.	V.I.
1	(a)	Normal Aging Process	X		
1	(b)	Community Resources		X	
1	(c)	Hazards in Air, Water, and Food		X	
1	(d)	Nutritional Requirements		X	
1	(e)	Fibre in the Diet	X		
1	(f)	Use and Misuse of Vitamins			X
1	(g)	Diet and Heart Disease	X		
1	(h)	Salt in the Diet	X		
1	(i)	Calcium Requirements	X		
1	(j)	Cholesterol and Fats in the Diet	X		
1	(k)	Shopping for Food on a Budget	X		
1	(m)	Foot Care	X		
1	(n)	Dental Care	X		
1	(o)	Care of the Eyes	X		
1	(p)	Stress Management	X		
1	(q)	How to Relax	X		
1	(s)	Building Healthy Relationships	X		
1	(t)	Maintaining Control	X		
1	(u)	Adapting to Change	X		
1	(v)	Assertiveness Training	X		
1	(y)	Immunization for Seniors	X		
1	(z)	Safety in the Home	X		
1	(aa)	Safety in the Community	X		
1	(bb)	Crime Against the Elderly		X	
1	(cc)	Proper Use of Medications		X	
1	(ee)	Breast Self Examination	X		
2	(a)	High Blood Pressure	X		
2	(b)	Heart Problems	X		
2	(c)	Stroke	X		
2	(d)	Circulation Problems	X		
2	(f)	Intestinal Disorders	X		
2	(g)	Kidney Disease	X		
2	(k)	Back Problems	X		
2	(l)	Osteoporosis	X		
2	(m)	Arthritis	X		
2	(q)	Chronic Bronchitis	X		
2	(t)	Diabetes	X		
2	(u)	Problems with Weight Control	X		
2	(x)	Coping with Poor Vision	X		
2	(y)	Glaucoma or Cataracts	X		
2	(kk)	Rape	X		
2	(ll)	Physical Disability	X		
2	(mm)	Cancer or Leukemia	X		
2	(nn)	Insomnia	X		

Participant Profile 7 (continued)

		S.I.	M.I.	V.I.
2 (oo)	Pain Control	X		
2 (pp)	Body Temperature Problems	X		
2 (qq)	Elder Abuse	X		
*2 (rr)	Colds			X

Total Learning Needs and Interests - 48.

Key: S.I. - Slightly Interested
M.I. - Moderately Interested
V.I. - Very Interested

*Topic added by participant.

Learning Needs and Interests - Participant Profile 8

			S.I.	M.I.	V.I.
1	(a)	Normal Aging Process			X
1	(b)	Community Resources	X		
1	(c)	Hazards in Air, Water, and Food	X		
1	(d)	Nutritional Requirements			X
1	(e)	Fibre in the Diet			X
1	(f)	Use and Misuse of Vitamins		X	
1	(g)	Diet and Heart Disease		X	
1	(h)	Salt in the Diet	X		
1	(i)	Calcium Requirements	X		
1	(j)	Cholesterol and Fats in the Diet			X
1	(k)	Shopping for Food on a Budget			X
1	(l)	Exercise for Seniors	X		
1	(o)	Care of the Eyes		X	
1	(p)	Stress Management		X	
1	(q)	How to Relax	X		
1	(r)	Sexuality and Aging			X
1	(s)	Building Healthy Relationships		X	
1	(t)	Maintaining Control	X		
1	(v)	Assertiveness Training			X
1	(x)	Bereavement	X		
1	(y)	Immunization for Seniors	X		
1	(z)	Safety in the Home	X		
1	(aa)	Safety in the Community		X	
1	(bb)	Crime Against the Elderly		X	
1	(cc)	Proper Use of Medications			X
2	(a)	High Blood Pressure		X	
2	(b)	Heart Problems			X
2	(c)	Stroke			X
2	(d)	Circulation Problems		X	
2	(g)	Kidney Disease	X		
2	(h)	Other Urinary Diseases			X
2	(i)	Problem Controlling your Bladder			X
2	(j)	Venereal Disease	X		
2	(k)	Back Problems		X	
2	(m)	Arthritis	X		
2	(n)	Rheumatism	X		
2	(o)	Asthma	X		
2	(p)	Emphysema	X		
2	(q)	Chronic Bronchitis	X		
2	(t)	Diabetes	X		
2	(u)	Problems with Weight Control		X	
2	(w)	Coping with Poor Hearing			X
2	(x)	Coping with Poor Vision			X

Participant Profile 8 (continued)

		S.I.	M.I.	V.I.
2 (y)	Glaucoma or Cataracts		X	
2 (z)	Epilepsy	X		
2 (aa)	Mental Illness	X		
2 (bb)	Mental Confusion			X
2 (cc)	Memory Problems			X
2 (dd)	Depression	X		
2 (gg)	Dizziness	X		
2 (jj)	Drug Abuse		X	
2 (ll)	Physical Disability	X		
2 (mm)	Cancer or Leukemia	X		
2 (nn)	Insomnia		X	
2 (oo)	Pain Control	X		
2 (pp)	Body Temperature Problems	X		
2 (qq)	Elder Abuse		X	

Total Learning Needs and Interests - 58.

Key: S.I. - Slightly Interested
M.I. - Moderately Interested
V.I. - Very Interested

Learning Needs and Interests - Participant Profile 9

			S.I.	M.I.	V.I.
1	(a)	Normal Aging Process			X
1	(b)	Community Resources			X
1	(c)	Hazards in Air, Water, and Food			X
1	(d)	Nutritional Requirements			X
1	(e)	Fibre in the Diet			X
1	(f)	Use and Misuse of Vitamins			X
1	(g)	Diet and Heart Disease			X
1	(i)	Calcium Requirements			X
1	(j)	Cholesterol and Fats in the Diet			X
1	(k)	Shopping for Food on a Budget			X
1	(m)	Foot Care			X
1	(o)	Care of the Eyes			X
1	(p)	Stress Management			X
1	(s)	Building Healthy Relationships			X
1	(t)	Maintaining Control			X
1	(u)	Adapting to Change			X
1	(v)	Assertiveness Training			X
1	(y)	Immunization for Seniors			X
1	(aa)	Safety in the Community			X
1	(bb)	Crime Against the Elderly			X
2	(a)	High Blood Pressure			X
2	(b)	Heart Problems			X
2	(d)	Circulation Problems			X
2	(e)	Ulcers			X
2	(f)	Intestinal Disorders			X
2	(h)	Other Urinary Diseases			X
2	(i)	Problem Controlling your Bladder			X
2	(j)	Venereal Disease			X
2	(m)	Arthritis			X
2	(o)	Asthma			X
2	(q)	Chronic Bronchitis			X
2	(r)	Tuberculosis			X
2	(t)	Diabetes			X
2	(u)	Problems with Weight Control			X
2	(w)	Coping with Poor Hearing			X
2	(x)	Coping with Poor Vision			X
2	(y)	Glaucoma or Cataracts			X
2	(dd)	Depression			X
2	(ii)	Alcohol Abuse			X
2	(jj)	Drug Abuse			X

Participant Profile 9 (continued)

	S.I.	M.I.	V.I.
2 (ll) Physical Disability			X
2 (mm) Cancer or Leukemia			X
2 (qq) Elder Abuse			X

Total Learning Needs and Interests - 43.

Key: S.I. - Slightly Interested
M.I. - Moderately Interested
V.I. - Very Interested

Learning Needs and Interests - Participant Profile 10

			S.I.	M.I.	V.I.
1	(a)	Normal Aging Process			X
1	(b)	Community Resources			X
1	(c)	Hazards in Air, Water, and Food			X
1	(d)	Nutritional Requirements			X
1	(e)	Fibre in the Diet		X	
1	(g)	Diet and Heart Disease			X
1	(h)	Salt in the Diet			X
1	(j)	Cholesterol and Fats in the Diet			X
1	(l)	Exercise for Seniors			X
1	(m)	Foot Care			X
1	(n)	Dental Care			X
1	(o)	Care of the Eyes			X
1	(p)	Stress Management			X
1	(q)	How to Relax			X
1	(s)	Building Healthy Relationships			X
1	(y)	Immunization for Seniors			X
1	(z)	Safety in the Home			X
1	(bb)	Crime Against the Elderly			X
1	(cc)	Proper Use of Medications			X
2	(a)	High Blood Pressure			X
2	(b)	Heart Problems			X
2	(c)	Stroke			X
2	(d)	Circulation Problems			X
2	(f)	Intestinal Disorders			X
2	(g)	Kidney Disease			X
2	(h)	Other Urinary Diseases			X
2	(i)	Problem Controlling your Bladder			X
2	(l)	Osteoporosis			X
2	(m)	Arthritis			X
2	(n)	Rheumatism			X
2	(o)	Asthma			X
2	(p)	Emphysema			X
2	(q)	Chronic Bronchitis			X
2	(t)	Diabetes			X
2	(u)	Problems with Weight Control			X
2	(v)	Problems with Quitting Smoking			X
2	(w)	Coping with Poor Hearing			X
2	(x)	Coping with Poor Vision			X
2	(y)	Glaucoma or Cataracts			X
2	(bb)	Mental Confusion			X
2	(cc)	Memory Problems			X
2	(dd)	Depression			X
2	(ff)	Bad Nerves			X

Participant Profile 10 (continued)

	S.I.	M.I.	V.I.
2 (ll) Physical Disability			X
2 (mm) Cancer or Leukemia			X
2 (nn) Insomnia			X
2 (pp) Body Temperature Problems			X
2 (qq) Elder Abuse			X

Total Learning Needs and Interests - 48.

Key: S.I. - Slightly Interested
M.I. - Moderately Interested
V.I. - Very Interested

One topic was excluded because it was not health related.

Learning Needs and Interests - Participant Profile 11

		S.I.	M.I.	V.I.
1 (a)	Normal Aging Process	X		
1 (b)	Community Resources	X		
1 (c)	Hazards in Air, Water, and Food			X
1 (d)	Nutritional Requirements		X	
1 (e)	Fibre in the Diet		X	
1 (f)	Use and Misuse of Vitamins	X		
1 (g)	Diet and Heart Disease		X	
1 (h)	Salt in the Diet	X		
1 (i)	Calcium Requirements	X		
1 (j)	Cholesterol and Fats in the Diet			X
1 (k)	Shopping for Food on a Budget	X		
1 (m)	Foot Care	X		
1 (o)	Care of the Eyes	X		
1 (p)	Stress Management	X		
1 (u)	Adapting to Change	X		
1 (x)	Bereavement	X		
1 (z)	Safety in the Home		X	
1 (aa)	Safety in the Community		X	
1 (bb)	Crime Against the Elderly			X
2 (a)	High Blood Pressure		X	
2 (b)	Heart Problems			X
2 (c)	Stroke		X	
2 (m)	Arthritis	X		
2 (t)	Diabetes	X		
2 (ll)	Physical Disability		X	
2 (mm)	Cancer or Leukemia	X		

Total Learning Needs and Interests - 26.

Key: S.I. - Slightly Interested
M.I. - Moderately Interested
V.I. - Very Interested

Learning Needs and Interests - Participant Profile 12

			S.I.	M.I.	V.I.
1	(b)	Community Resources			X
1	(c)	Hazards in Air, Water, and Food			X
1	(d)	Nutritional Requirements			X
1	(e)	Fibre in the Diet			X
1	(f)	Use and Misuse of Vitamins			X
1	(g)	Diet and Heart Disease			X
1	(h)	Salt in the Diet			X
1	(i)	Calcium Requirements		X	
1	(j)	Cholesterol and Fats in the Diet			X
1	(k)	Shopping for Food on a Budget	X		
1	(m)	Foot Care			X
1	(n)	Dental Care			X
1	(o)	Care of the Eyes			X
1	(z)	Safety in the Home			X
1	(aa)	Safety in the Community		X	
1	(bb)	Crime Against the Elderly			X
1	(cc)	Proper Use of Medications			X
2	(a)	High Blood Pressure	X		
2	(b)	Heart Problems			X
2	(c)	Stroke			X
2	(d)	Circulation Problems			X
2	(e)	Ulcers			X
2	(f)	Intestinal Problems	X		
2	(g)	Kidney Disease	X		
2	(h)	Other Urinary Diseases	X		
2	(i)	Problems Controlling your Bladder		X	
2	(o)	Asthma	X		
2	(p)	Emphysema	X		
2	(q)	Chronic Bronchitis			X
2	(t)	Diabetes			X
2	(u)	Problems with Weight Control	X		
2	(x)	Coping with Poor Vision		X	
2	(y)	Glaucoma or Cataracts			X
2	(ii)	Alcohol Abuse		X	
2	(jj)	Drug Abuse		X	
2	(ll)	Physical Disability	X		
2	(oo)	Pain Control	X		
*2	(rr)	Hearing a Pulse in the Ear			X

Total Learning Needs and Interests - 38.

Key: S.I. - Slightly Interested
M.I. - Moderately Interested
V.I. - Very Interested
*Topic added by participant.

Learning Needs and Interests - Participant Profile 13

			S.I.	M.I.	V.I.
1	(a)	Normal Aging Process		X	
1	(b)	Community Resources		X	
1	(c)	Hazards in Air, Water, and Food		X	
1	(d)	Nutritional Requirements		X	
1	(e)	Fibre in the Diet		X	
1	(f)	Use and Misuse of Vitamins		X	
1	(g)	Diet and Heart Disease		X	
1	(h)	Salt in the Diet			X
1	(i)	Calcium Requirements		X	
1	(j)	Cholesterol and Fats in the Diet		X	
1	(l)	Exercise for Seniors		X	
1	(m)	Foot Care		X	
1	(n)	Dental Care		X	
1	(o)	Care of the Eyes		X	
1	(p)	Stress Management			X
1	(q)	How to Relax			X
1	(r)	Sexuality and Aging		X	
1	(s)	Building Healthy Relationships			X
1	(t)	Maintaining Control			X
1	(u)	Adapting to Change			X
1	(v)	Assertiveness Training		X	
1	(w)	Avoiding Constipation		X	
1	(x)	Bereavement		X	
1	(y)	Immunization for Seniors		X	
1	(z)	Safety in the Home			X
1	(aa)	Safety in the Community			X
1	(bb)	Crime Against the Elderly			X
1	(cc)	Proper Use of Medications			X
2	(a)	High Blood Pressure			X
2	(b)	Heart Problems			X
2	(c)	Stroke			X
2	(d)	Circulation Problems			X
2	(e)	Ulcers		X	
2	(f)	Intestinal Disorders		X	
2	(g)	Kidney Disease		X	
2	(h)	Other Urinary Diseases		X	
2	(i)	Problem Controlling your Bladder		X	
2	(j)	Venereal Diseases	X		
2	(k)	Back Problems		X	
2	(l)	Osteoporosis		X	
2	(m)	Arthritis		X	
2	(n)	Rheumatism		X	
2	(o)	Asthma		X	

Participant Profile 13 (continued)

			S.I.	M.I.	V.I.
2	(p)	Emphysema		X	
2	(q)	Chronic Bronchitis		X	
2	(r)	Tuberculosis		X	
2	(s)	Anemia		X	
2	(t)	Diabetes		X	
2	(u)	Problems with Weight Control		X	
2	(v)	Problems Quitting Smoking	X		
2	(w)	Coping with Poor Hearing			X
2	(x)	Coping with Poor Vision			X
2	(y)	Glaucoma or Cataracts			X
2	(z)	Epilepsy		X	
2	(aa)	Mental Illness		X	
2	(bb)	Mental Confusion		X	
2	(cc)	Memory Problems		X	
2	(dd)	Depression			X
2	(ee)	Suicide		X	
2	(ff)	Bad Nerves		X	
2	(gg)	Dizziness		X	
2	(hh)	Frequent Headaches		X	
2	(ii)	Alcohol Abuse		X	
2	(jj)	Drug Abuse		X	
2	(ll)	Physical Disability		X	
2	(mm)	Cancer or Leukemia		X	
2	(nn)	Insomnia		X	
2	(oo)	Pain Control			X
2	(pp)	Body Temperature Problems		X	
2	(qq)	Elder Abuse		X	
*2	(rr)	Warts on the Upper Lip		X	

Total Learning Needs and Interests - 71.

Key: S.I. - Slightly Interested
M.I. - Moderately Interested
V.I. - Very Interested

*Topic added by participant.

Learning Needs and Interests - Participant Profile 14

			S.I.	M.I.	V.I.
1	(a)	Normal Aging Process		X	
1	(b)	Community Resources	X		
1	(d)	Nutritional Requirements		X	
1	(e)	Fibre in the Diet	X		
1	(f)	Use and Misuse of Vitamins			X
1	(g)	Diet and Heart Disease			X
1	(h)	Salt in the Diet		X	
1	(i)	Calcium Requirements		X	
1	(j)	Cholesterol and Fats in the Diet		X	
1	(k)	Shopping for Food on a Budget		X	
1	(l)	Exercise for Seniors			X
1	(m)	Foot Care		X	
1	(n)	Dental Care	X		
1	(o)	Care of the Eyes			X
1	(p)	Stress Management			X
1	(q)	How to Relax			X
1	(r)	Sexuality and Aging			X
1	(s)	Building Healthy Relationships			X
1	(t)	Maintaining Control		X	
1	(u)	Adapting to Change		X	
1	(v)	Assertiveness Training		X	
1	(w)	Avoiding Constipation		X	
1	(x)	Bereavement			X
1	(y)	Immunization for Seniors		X	
1	(z)	Safety in the Home			X
1	(aa)	Safety in the Community			X
1	(bb)	Crime Against the Elderly			X
1	(cc)	Proper Use of Medications			X
2	(a)	High Blood Pressure			X
2	(b)	Heart Problems			X
2	(c)	Stroke			X
2	(d)	Circulation Problems		X	
2	(e)	Ulcers	X		
2	(f)	Intestinal Disorders	X		
2	(g)	Kidney Disease	X		
2	(h)	Other Urinary Diseases		X	
2	(i)	Problem Controlling your Bladder		X	
2	(k)	Back Problems		X	
2	(l)	Osteoporosis	X		
2	(m)	Arthritis			X
2	(n)	Rheumatism		X	
2	(o)	Asthma	X		
2	(p)	Emphysema		X	

Participant Profile 14 (continued)

		S.I.	M.I.	V.I.
2 (q)	Chronic Bronchitis	X		
2 (r)	Tuberculosis	X		
2 (s)	Anemia		X	
2 (t)	Diabetes			X
2 (w)	Coping with Poor Hearing		X	
2 (x)	Coping with Poor Vision		X	
2 (y)	Glaucoma or Cataracts		X	
2 (z)	Epilepsy	X		
2 (aa)	Mental Illness		X	
2 (bb)	Mental Confusion			X
2 (cc)	Memory Problems		X	
2 (dd)	Depression	X		
2 (ff)	Bad Nerves	X		
2 (gg)	Dizziness	X		
2 (ii)	Alcohol Abuse	X		
2 (jj)	Drug Abuse			X
2 (ll)	Physical Disability	X		
2 (mm)	Cancer or Leukemia		X	
2 (nn)	Insomnia	X		
2 (oo)	Pain Control	X		
2 (pp)	Body Temperature Problems		X	
2 (qq)	Elder Abuse		X	

Total Learning Needs and Interests - 65.

Key: S.I. - Slightly Interested
M.I. - Moderately Interested
V.I. - Very Interested

Learning Needs and Interests - Participant Profile 15

			S.I.	M.I.	V.I.
1	(a)	Normal Aging Process		X	
1	(b)	Community Resources			X
1	(c)	Hazards in Air, Water, and Food		X	
1	(d)	Nutritional Requirements	X		
1	(e)	Fibre in the Diet			X
1	(g)	Diet and Heart Disease	X		
1	(h)	Salt in the Diet		X	
1	(i)	Calcium Requirements		X	
1	(j)	Cholesterol and Fats in the Diet		X	
1	(k)	Shopping for Food on a Budget		X	
1	(l)	Exercise for Seniors		X	
1	(m)	Foot Care			X
1	(n)	Dental Care			X
1	(o)	Care of the Eyes			X
1	(p)	Stress Management			X
1	(q)	How to Relax			X
1	(r)	Sexuality and Aging		X	
1	(s)	Building Healthy Relationships			X
1	(t)	Maintaining Control			X
1	(u)	Adapting to Change			X
1	(v)	Assertiveness Training			X
1	(x)	Bereavement	X		
1	(y)	Immunization for Seniors	X		
1	(z)	Safety in the Home	X		
1	(aa)	Safety in the Community	X		
1	(bb)	Crime Against the Elderly			X
1	(cc)	Proper Use of Medications		X	
1	(ee)	Breast Self Examination	X		
2	(a)	High Blood Pressure		X	
2	(b)	Heart Problems			X
2	(c)	Stroke			X
2	(d)	Circulation Problems			X
2	(e)	Ulcers	X		
2	(f)	Intestinal Disorders			X
2	(g)	Kidney Disease			X
2	(h)	Other Urinary Diseases		X	
2	(i)	Problem Controlling your Bladder	X		
2	(k)	Back Problems		X	
2	(l)	Osteoporosis		X	
2	(m)	Arthritis			X
2	(n)	Rheumatism		X	
2	(o)	Asthma		X	
2	(q)	Chronic Bronchitis	X		

Participant Profile 15 (continued)

		S.I.	M.I.	V.I.
2 (r)	Tuberculosis	X		
2 (s)	Anemia	X		
2 (t)	Diabetes		X	
2 (u)	Problems with Weight Control			X
2 (w)	Coping with Poor Hearing		X	
2 (x)	Coping with Poor Vision		X	
2 (y)	Glaucoma or Cataracts			X
2 (z)	Epilepsy	X		
2 (aa)	Mental Illness		X	
2 (bb)	Mental Confusion			X
2 (cc)	Memory Problems		X	
2 (dd)	Depression			X
2 (ee)	Suicide	X		
2 (ff)	Bad Nerves			X
2 (gg)	Dizziness		X	
2 (hh)	Frequent Headaches		X	
2 (ii)	Alcohol Abuse	X		
2 (jj)	Drug Abuse	X		
2 (ll)	Physical Disability		X	
2 (mm)	Cancer or Leukemia		X	
2 (nn)	Insomnia			X
2 (oo)	Pain Control		X	
2 (pp)	Body Temperature Problems	X		
2 (qq)	Elder Abuse	X		
*2 (rr)	Skin Problems			X

Total Learning Needs and Interests - 68.

Key: S.I. - Slightly Interested
M.I. - Moderately Interested
V.I. - Very Interested

*Topic added by participant.

Learning Needs and Interests - Participant Profile 16

			S.I.	M.I.	V.I.
1	(a)	Normal Aging Process		X	
1	(b)	Community Resources	X		
1	(c)	Hazards in Air, Water, and Food			X
1	(d)	Nutritional Requirements	X		
1	(f)	Use and Misuse of Vitamins			X
1	(g)	Diet and Heart Disease			X
1	(h)	Salt in the Diet			X
1	(i)	Calcium Requirements			X
1	(j)	Cholesterol and Fats in the Diet			X
1	(k)	Shopping for Food on a Budget	X		
1	(l)	Exercise for Seniors	X		
1	(m)	Foot Care			X
1	(n)	Dental Care			X
1	(o)	Care of the Eyes			X
1	(p)	Stress Management			X
1	(q)	How to Relax		X	
1	(s)	Building Healthy Relationships		X	
1	(u)	Adapting to Change		X	
1	(v)	Assertiveness Training			X
1	(w)	Avoiding Constipation		X	
1	(x)	Bereavement			X
1	(y)	Immunization for Seniors			X
1	(z)	Safety in the Home			X
1	(aa)	Safety in the Community			X
1	(bb)	Crime Against the Elderly			X
1	(cc)	Proper Use of Medications			X
2	(a)	High Blood Pressure			X
2	(b)	Heart Problems			X
2	(c)	Stroke			X
2	(d)	Circulation Problems			X
2	(f)	Intestinal Disorders			X
2	(k)	Back Problems			X
2	(l)	Osteoporosis			X
2	(m)	Arthritis			X
2	(n)	Rheumatism		X	
2	(t)	Diabetes		X	
2	(u)	Problems with Weight Control			X
2	(w)	Coping with Poor Hearing		X	
2	(x)	Coping with Poor Vision			X
2	(y)	Glaucoma or Cataracts			X
2	(bb)	Mental Confusion			X
2	(cc)	Memory Problems			X
2	(dd)	Depression			X

Participant Profile 16 (continued)

	S.I.	M.I.	V.I.
2 (ff) Bad Nerves		X	
2 (gg) Dizziness		X	
2 (hh) Frequent Headaches		X	
2 (jj) Drug Abuse			X
2 (kk) Rape		X	
2 (ll) Physical Disability			X
2 (mm) Cancer or Leukemia			X
2 (nn) Insomnia		X	
2 (oo) Pain Control		X	
2 (pp) Body Temperature Problems			X
2 (qq) Elder Abuse			X
*2 (rr) Hardening of the Arteries	X		

Total Learning Needs and Interests - 68.

Key: S.I. - Slightly Interested
M.I. - Moderately Interested
V.I. - Very Interested

*Topic added by participant.

Learning Needs and Interests - Participant Profile 17

			S.I.	M.I.	V.I.
1	(a)	Normal Aging Process		X	
1	(b)	Community Resources	X		
1	(c)	Hazards in Air, Water, and Food			X
1	(d)	Nutritional Requirements	X		
1	(e)	Fibre in the Diet	X		
1	(f)	Use and Misuse of Vitamins		X	
1	(h)	Salt in the Diet		X	
1	(i)	Calcium Requirements		X	
1	(j)	Cholesterol and Fats in the Diet		X	
1	(l)	Exercise for Seniors			X
1	(m)	Foot Care			X
1	(n)	Dental Care		X	
1	(o)	Care of the Eyes		X	
1	(p)	Stress Management		X	
1	(q)	How to Relax	X		
1	(r)	Sexuality and Aging		X	
1	(s)	Building Healthy Relationships	X		
1	(u)	Adapting to Change		X	
1	(v)	Assertiveness Training			X
1	(w)	Avoiding Constipation			X
1	(z)	Safety in the Home			X
1	(aa)	Safety in the Community			X
1	(bb)	Crime Against the Elderly			X
1	(cc)	Proper Use of Medications			X
2	(a)	High Blood Pressure			X
2	(b)	Heart Problems		X	
2	(c)	Stroke			X
2	(d)	Circulation Problems			X
2	(f)	Intestinal Disorders		X	
2	(g)	Kidney Disease	X		
2	(h)	Other Urinary Diseases			X
2	(i)	Problem Controlling your Bladder		X	
2	(j)	Venereal Disease		X	
2	(m)	Arthritis	X		
2	(n)	Rheumatism	X		
2	(p)	Emphysema	X		
2	(r)	Tuberculosis		X	
2	(s)	Anemia		X	
2	(w)	Coping with Poor Hearing			X
2	(y)	Glaucoma or Cataracts		X	
2	(aa)	Mental Illness			X
2	(bb)	Mental Confusion		X	
2	(cc)	Memory Problems			X

Participant Profile 17 (continued)

	S.I.	M.I.	V.I.
2 (dd) Depression			X
2 (ee) Suicide	X		
2 (ff) Bad Nerves	X		
2 (gg) Dizziness	X		
2 (ll) Physical Disability		X	
2 (mm) Cancer or Leukemia			X
2 (nn) Insomnia		X	
2 (oo) Pain Control		X	
2 (rr) Parkinson's Disease			X

Total Learning Needs and Interests - 52.

Key: S.I. - Slightly Interested
M.I. - Moderately Interested
V.I. - Very Interested

*Topic added by participant.

Learning Needs and Interests - Participant Profile 18

			S.I.	M.I.	V.I.
1	(a)	Normal Aging Process	X		
1	(b)	Community Resources	X		
1	(c)	Hazards in Air, Water, and Food	X		
1	(g)	Diet and Heart Disease	X		
1	(h)	Salt in the Diet	X		
1	(j)	Cholesterol and Fats in the Diet		X	
1	(l)	Exercise for Seniors	X		
1	(m)	Foot Care			X
1	(o)	Care of the Eyes			X
1	(p)	Stress Management			X
1	(q)	How to Relax	X		
1	(r)	Sexuality and Aging			X
1	(s)	Building Healthy Relationships			X
1	(t)	Maintaining Control			X
1	(u)	Adapting to Change	X		
1	(v)	Assertiveness Training		X	
1	(w)	Avoiding Constipation	X		
1	(z)	Safety in the Home	X		
1	(aa)	Safety in the Community	X		
1	(bb)	Crime Against the Elderly	X		
1	(cc)	Proper Use of Medications	X		
2	(a)	High Blood Pressure			X
2	(b)	Heart Problems			X
2	(c)	Stroke			X
2	(d)	Circulation Problems			X
2	(f)	Intestinal Disorders			X
2	(h)	Other Urinary Diseases			X
2	(i)	Problem Controlling your Bladder		X	
2	(k)	Back Problems			X
2	(m)	Arthritis			X
2	(n)	Rheumatism			X
2	(p)	Emphysema	X		
2	(q)	Chronic Bronchitis	X		
2	(t)	Diabetes			X
2	(w)	Coping with Poor Hearing	X		
2	(x)	Coping with Poor Vision			X
2	(y)	Glaucoma or Cataracts			X
2	(cc)	Memory Problems	X		
2	(dd)	Depression	X		

Participant Profile 18 (continued)

	S.I.	M.I.	V.I.
2 (mm) Cancer of Leukemia			X
2 (qq) Elder Abuse			X
*2 (rr) Foot Problems		X	

Total Learning Needs and Interests - 42.

Key: S.I. - Slightly Interested
M.I. - Moderately Interested
V.I. - Very Interested

*Topic added by participant.

Learning Needs and Interests - Participant Profile 19

			S.I.	M.I.	V.I.
1	(a)	Normal Aging Process		X	
1	(b)	Community Resources			X
1	(c)	Hazards in Air, Water, and Food			X
1	(d)	Nutritional Requirements	X		
1	(e)	Fibre in the Diet		X	
1	(f)	Use and Misuse of Vitamins	X		
1	(g)	Diet and Heart Disease		X	
1	(j)	Cholesterol and Fats in the Diet	X		
1	(k)	Shopping for Food on a Budget		X	
1	(l)	Exercise for Seniors		X	
1	(m)	Foot Care		X	
1	(n)	Dental Care		X	
1	(o)	Care of the Eyes			X
1	(p)	Stress Management		X	
1	(q)	How to Relax			X
1	(r)	Sexuality and Aging			X
1	(s)	Building Healthy Relationships			X
1	(t)	Maintaining Control			X
1	(u)	Adapting to Change		X	
1	(v)	Assertiveness Training		X	
1	(w)	Avoiding Constipation	X		
1	(x)	Bereavement		X	
1	(y)	Immunization for Seniors			X
1	(z)	Safety in the Home			X
1	(aa)	Safety in the Community	X		
1	(bb)	Crime Against the Elderly		X	
1	(cc)	Proper Use of Medications		X	
2	(a)	High Blood Pressure		X	
2	(b)	Heart Problems			X
2	(c)	Stroke			X
2	(d)	Circulation Problems		X	
2	(e)	Ulcers		X	
2	(f)	Intestinal Disorders	X		
2	(g)	Kidney Disease	X		
2	(h)	Other Urinary Diseases	X		
2	(i)	Problem Controlling your Bladder		X	
2	(j)	Venereal Diseases	X		
2	(k)	Back Problems		X	
2	(l)	Osteoporosis	X		
2	(m)	Arthritis		X	
2	(n)	Rheumatism	X		
2	(o)	Asthma		X	
2	(p)	Emphysema		X	

Participant Profile 19 (continued)

		S.I.	M.I.	V.I.
2 (q)	Chronic Bronchitis	X		
2 (r)	Tuberculosis	X		
2 (s)	Anemia	X		
2 (t)	Diabetes		X	
2 (u)	Problems with Weight Control		X	
2 (w)	Coping with Poor Hearing		X	
2 (x)	Coping with Poor Vision		X	
2 (y)	Glaucoma or Cataracts			X
2 (bb)	Mental Confusion		X	
2 (cc)	Memory Problems		X	
2 (ff)	Bad Nerves	X		
2 (gg)	Dizziness	X		
2 (ii)	Alcohol Abuse		X	
2 (jj)	Drug Abuse			X
2 (ll)	Physical Disability		X	
2 (mm)	Cancer or Leukemia	X		
2 (nn)	Insomnia		X	
2 (oo)	Pain Control		X	
2 (qq)	Elder Abuse		X	
*2 (rr)	Parkinson's Disease			X

Total Learning Needs and Interests - 63.

Key: S.I. - Slightly Interested
M.I. - Moderately Interested
V.I. - Very Interested

*Topic added by participant.

Learning Needs and Interests - Participant Profile 20

			S.I.	M.I.	V.I.
1	(a)	Normal Aging Process			X
1	(b)	Community Resources		X	
1	(c)	Hazards in Air, Water, and Food			X
1	(d)	Nutritional Requirements			X
1	(e)	Fibre in the Diet		X	
1	(f)	Use and Misuse of Vitamins			X
1	(g)	Diet and Heart Disease			X
1	(h)	Salt in the Diet		X	
1	(i)	Calcium Requirements		X	
1	(j)	Cholesterol and Fats in the Diet			X
1	(k)	Shopping for Food on a Budget		X	
1	(l)	Exercise for Seniors		X	
1	(m)	Foot Care		X	
1	(n)	Dental Care		X	
1	(o)	Care of the Eyes	X		
1	(p)	Stress Management	X		
1	(q)	How to Relax	X		
1	(r)	Sexuality and Aging	X		
1	(u)	Adapting to Change	X		
1	(aa)	Safety in the Community		X	
1	(bb)	Crime Against the Elderly	X		
1	(cc)	Proper Use of Medications	X		
2	(a)	High Blood Pressure	X		
2	(b)	Heart Problems			X
2	(c)	Stroke			X
2	(d)	Circulation Problems			X
2	(e)	Ulcers	X		
2	(f)	Intestinal Disorders	X		
2	(g)	Kidney Disease	X		
2	(h)	Other Urinary Diseases		X	
2	(i)	Problem Controlling your Bladder	X		
2	(k)	Back Problems			X
2	(l)	Osteoporosis		X	
2	(m)	Arthritis		X	
2	(n)	Rheumatism		X	
2	(q)	Chronic Bronchitis	X		
2	(u)	Problems with Weight Control		X	
2	(cc)	Memory Problems	X		
2	(dd)	Depression	X		

Participant Profile 20 (continued)

	S.I.	M.I.	V.I.
2 (mm) Cancer or Leukemia	X		
2 (nn) Insomnia	X		
2 (oo) Pain Control		X	

Total Learning Needs and Interests - 42.

Key: S.I. - Slightly Interested
M.I. - Moderately Interested
V.I. - Very Interested

Learning Needs and Interests - Participant Profile 21

			S.I.	M.I.	V.I.
1	(a)	Normal Aging Process			X
1	(b)	Community Resources			X
1	(c)	Hazards in Air, Water, and Food			X
1	(d)	Nutritional Requirements			X
1	(e)	Fibre in the Diet			X
1	(f)	Use and Misuse of Vitamins			X
1	(g)	Diet and Heart Disease			X
1	(h)	Salt in the Diet			X
1	(i)	Calcium Requirements			X
1	(j)	Cholesterol and Fats in the Diet			X
1	(k)	Shopping for Food on a Budget			X
1	(l)	Exercise for Seniors			X
1	(m)	Foot Care			X
1	(n)	Dental Care			X
1	(o)	Care of the Eyes			X
1	(p)	Stress Management			X
1	(q)	How to Relax			X
1	(r)	Sexuality and Aging			X
1	(s)	Building Healthy Relationships			X
1	(t)	Maintaining Control			X
1	(u)	Adapting to Change			X
1	(v)	Assertiveness Training			X
1	(w)	Avoiding Constipation			X
1	(x)	Bereavement			X
1	(y)	Immunization for Seniors			X
1	(z)	Safety in the Home			X
1	(aa)	Safety in the Community			X
1	(bb)	Crime Against the Elderly			X
1	(cc)	Proper Use of Medications			X
2	(a)	High Blood Pressure			X
2	(b)	Heart Problems			X
2	(c)	Stroke			X
2	(d)	Circulation Problems			X
2	(e)	Ulcers			X
2	(f)	Intestinal Disorders			X
2	(g)	Kidney Disease			X
2	(h)	Other Urinary Diseases			X
2	(i)	Problem Controlling your Bladder			X
2	(j)	Venereal Diseases			X
2	(k)	Back Problems			X
2	(l)	Osteoporosis			X
2	(m)	Arthritis			X
2	(n)	Rheumatism			X

Participant Profile 21 (continued)

		S.I.	M.I.	V.I.
2 (o)	Asthma			X
2 (p)	Emphysema			X
2 (q)	Chronic Bronchitis			X
2 (r)	Tuberculosis			X
2 (s)	Anemia			X
2 (t)	Diabetes			X
2 (u)	Problems with Weight Control			X
2 (w)	Coping with Poor Hearing		X	
2 (y)	Glaucoma or Cataracts			X
2 (z)	Epilepsy			X
2 (aa)	Mental Illness			X
2 (bb)	Mental Confusion			X
2 (cc)	Memory Problems			X
2 (dd)	Depression			X
2 (ee)	Suicide			X
2 (ff)	Bad Nerves			X
2 (gg)	Dizziness			X
2 (hh)	Frequent Headaches			X
2 (ii)	Alcohol Abuse			X
2 (jj)	Drug Abuse			X
2 (ll)	Physical Disability			X
2 (mm)	Cancer or Leukemia			X
2 (nn)	Insomnia			X
2 (oo)	Pain Control			X
2 (pp)	Body Temperature Problems			X
2 (qq)	Elder Abuse			X

Total Learning Needs and Interests - 69.

Key: S.I. - Slightly Interested
M.I. - Moderately Interested
V.I. - Very Interested

Learning Needs and Interests - Participant Profile 22

			S.I.	M.I.	V.I.
1	(b)	Community Resources			X
1	(d)	Nutritional Requirements			X
1	(e)	Fibre in the Diet			X
1	(f)	Use and Misuse of Vitamins			X
1	(g)	Diet and Heart Disease			X
1	(h)	Salt in the Diet			X
1	(i)	Calcium Requirements			X
1	(j)	Cholesterol and Fats in the Diet			X
1	(k)	Shopping for Food on a Budget			X
1	(l)	Exercise for Seniors			X
1	(m)	Foot Care			X
1	(n)	Dental Care			X
1	(o)	Care of the Eyes			X
1	(p)	Stress Management			X
1	(q)	How to Relax			X
1	(r)	Sexuality and Aging			X
1	(s)	Building Healthy Relationships			X
1	(u)	Adapting to Change		X	
1	(w)	Avoiding Constipation			X
1	(y)	Immunization for Seniors			X
1	(aa)	Safety in the Community			X
1	(bb)	Crime Against the Elderly			X
1	(cc)	Proper Use of Medications			X
1	(dd)	Problems with the Menopause			X
1	(ee)	Breast Self Examination			X
2	(a)	High Blood Pressure			X
2	(b)	Heart Problems			X
2	(c)	Stroke			X
2	(d)	Circulation Problems			X
2	(e)	Ulcers			X
2	(f)	Intestinal Disorders			X
2	(g)	Kidney Disease			X
2	(h)	Other Urinary Diseases			X
2	(i)	Problem Controlling your Bladder			X
2	(j)	Venereal Diseases			X
2	(k)	Back Problems			X
2	(l)	Osteoporosis			X
2	(m)	Arthritis			X
2	(n)	Rheumatism			X
2	(o)	Asthma			X
2	(p)	Emphysema			X
2	(q)	Chronic Bronchitis			X
2	(r)	Tuberculosis			X

Participant Profile 22 (continued)

		S.I.	M.I.	V.I.
2 (s)	Anemia			X
2 (t)	Diabetes			X
2 (u)	Problems with Weight Control			X
2 (v)	Problems Quitting Smoking			X
2 (w)	Coping with Poor Hearing			X
2 (x)	Coping with Poor Vision			X
2 (y)	Glaucoma or Cataracts			X
2 (z)	Epilepsy			X
2 (aa)	Mental Illness			X
2 (bb)	Mental Confusion			X
2 (cc)	Memory Problems			X
2 (dd)	Depression			X
2 (ee)	Suicide			X
2 (ff)	Bad Nerves			X
2 (gg)	Dizziness			X
2 (hh)	Frequent Headaches			X
2 (ii)	Alcohol Abuse			X
2 (jj)	Drug Abuse			X
2 (kk)	Rape			X
2 (ll)	Physical Disability			X
2 (mm)	Cancer or Leukemia			X
2 (nn)	Insomnia			X
2 (oo)	Pain Control			X
2 (pp)	Body Temperature Problems			X
2 (qq)	Elder Abuse			X

Total Learning Needs and Interests - 68.

Key: S.I. - Slightly Interested
M.I. - Moderately Interested
V.I. - Very Interested

Learning Needs and Interests - Participant Profile 23

			S.I.	M.I.	V.I.
1	(a)	Normal Aging Process			X
1	(b)	Community Resources			X
1	(c)	Hazards in Air, Water, and Food		X	
1	(d)	Nutritional Requirements		X	
1	(e)	Fibre in the Diet	X		
1	(g)	Diet and Heart Disease	X		
1	(h)	Salt in the Diet		X	
1	(i)	Calcium Requirements			X
1	(j)	Cholesterol and Fats in the Diet			X
1	(l)	Exercise for Seniors		X	
1	(m)	Foot Care	X		
1	(n)	Dental Care		X	
1	(o)	Care of the Eyes			X
1	(q)	How to Relax		X	
1	(t)	Maintaining Control		X	
1	(u)	Adapting to Change	X		
1	(v)	Assertiveness Training	X		
1	(y)	Immunization for Seniors		X	
1	(aa)	Safety in the Community			X
1	(bb)	Crime Against the Elderly		X	
1	(cc)	Proper Use of Medications		X	
2	(a)	High Blood Pressure			X
2	(b)	Heart Problems			X
2	(c)	Stroke			X
2	(d)	Circulation Problems	X		
2	(e)	Ulcers			X
2	(f)	Intestinal Disorders			X
2	(g)	Kidney Disease		X	
2	(h)	Other Urinary Diseases		X	
2	(i)	Problem Controlling your Bladder		X	
2	(l)	Osteoporosis			X
2	(m)	Arthritis			X
2	(t)	Diabetes			X
2	(y)	Glaucoma or Cataracts			X
2	(aa)	Mental Illness			X
2	(bb)	Mental Confusion			X

Participant Profile 23 (continued)

	S.I.	M.I.	V.I.
2 (cc) Memory Problems			X
2 (gg) Dizziness			X
2 (ll) Physical Disability		X	
2 (oo) Pain Control			X
*2 (rr) Ideal Meal Sizes			X

Total Learning Needs and Interests - 63.

Key: S.I. - Slightly Interested
M.I. - Moderately Interested
V.I. - Very Interested

*Topic added by participant.